# Kant

1724-1804

# KANT'S BASIC CONCEPTS AND THE PROBLEM OF METAPHYSICS

# THE VALUE OF SYNTHESIS

G.W.F. Hegel: “Truth is not like a stamped coin issued ready from the mint.”

W. James: “In the great boarding-house of nature, the cakes and the butter and the syrup seldom come out so even and leave the plates so clean.”

F.P. Ramsey: “It is a heuristic maxim that the truth lies not in one of two disputed views, but in some third possibility which has not yet been thought of, and which we only discover by rejecting something assumed as obvious by the two disputants.”

# KANT’S SYNTHESIS

# I. Intuitions and Concepts

Both the Rationalists and Empiricists assume that judgment is a kind of seeing. Leibniz's *petite perceptions* and Hume's *ideas* are images. Not so for Kant.

***For Kant, knowing is a kind of doing.***

Even the raw data coming through the senses needs to be conceptualized.

This was a major advance in philosophy. Cf. Wittgenstein's meaning is use.

In A320 (not in your text) Kant provides several important definitions:

"The genus is *representation* in general. Subordinate to it stands representation with consciousness. A *perception* which relates solely to the subject as the modification of its state is *sensation*, an objective perception is *knowledge*. This is either *intuition* or *concept*. The former relates immediately to the object and is single, the latter refers to it mediately by means of a feature several things may have in common. The concept is either *empirical* or a *pure concept*.. The pure concept, in so far as it has its origin in the understanding alone (not in the pure image of sensibility), is called a *notion*. A concept formed from notions and transcending the possibility of experience is an *idea*, or concept of reason."

A ***perception*** is a representation with consciousness.

***Sensations*** are subjective representations. They relate solely to the subject as the modification of its state in sensation.

***Cognitions*** are objective representations.

***Knowledge*** involves cognition. There are two types of cognition:

***Intuition:*** Which relates immediately to the object, and is single.

***Concept:*** Which relates mediately to the object by means of a feature several things may have in common.

An ***empirical concept*** has its origin in intuition.

A ***pure concept*** is either a pure image of sensibility or has its origin in the understanding alone. The latter are called ***notions***.

A concept formed from notions and transcending the possibility of experience is ***an idea***.

**Intuitions** (*'Anschauung*,' meaning to look at without any connotations of special insight): Kant uses this word to refer to the raw data of perception. They are particular, they provide the matter on which concepts operate, and the mind is receptive to them. The faculty of sense experiences them. The concept of intuition is different from that of sensation. The latter presupposes concepts as well as intuitions. Intuitions do not.

**Concepts:** are universal in the sense that they are capable of applying to more than one thing (e.g. 'man'). They provide the form, and the mind is active with respect to them. They must ultimately relate to intuitions. The faculty of judgment creates them.

***Intuition*** refers to the raw data (matter) of sensation. ***Concepts*** are the form and are what the mind contributes.

Both Rationalism and Empiricism assume that there is only one source of knowledge. But, and this is a fundamental thesis of Kant's, all knowledge requires both sensing and thought. "Thoughts without content are empty. Intuitions without concepts are blind."

A being for whom there was no distinction between intuitions and concepts would be a being for whom the act of thinking and being presented with an object would be one and the same event. So the distinction between knowing an object and creating it would vanish. The only being to whom this might apply would be God.

# II. Synthetic *A Priori*

According to the Rationalists (Leibniz), knowledge is independent of experience. (Recall Descartes' piece of wax.) It is derived from pure reason and is analytic. Sense perception is just confused conceptual analysis. It requires a pre-established harmony that God designed. But, according to Kant, this leads to dogmatism.

According to Empiricists (Hume), all knowledge comes through experience. But, according to Kant, this leads to skepticism.

Both the Rationalists and Empiricists assume that judgments are either: (i) analytic *a priori* or (ii) synthetic *a posteriori*. Kant proposes that there is a third possibility: some judgments are synthetic *a priori*.

**The a priori/a posteriori** distinction deals with how judgments can be validated. *A priori* judgments are judgments whose truths can be validated independent of experience. They can't be falsified by experience. They come before experience.

According to Kant, there are two criteria of a judgment's being *a priori*:

1. **Universality**
2. **Necessity**

Note here that 'necessity' is functioning as an epistemological notion, unlike it was in the case of Leibniz and Hume. Why? Kant is interested in what is necessary for us to have knowledge, not in what is logically necessary. Logical possibility (which Kant is not interested in) is a much broader notion than epistemological possibility. This is an essential part of the Copernican Turn and the revolutionary aspect of Kant's view.

Kant also proposes two criteria for a judgment's being analytic:

**1. The Container Thesis**: The predicate is (at least implicitly) contained in the subject. E.g. In the statement 'All bodies are extended' the concept 'extended' is contained in the concept 'body'.

**2. The Contradiction Thesis**: The negation is a contradiction.

In a synthetic judgment the predicate adds something to the concept of the subject. The predicate is related to the subject through a third thing, 'X'. E.g. 'All bodies are heavy'.

Are there synthetic *a priori* judgments?

Hume denied that there were.

Kant, on the other hand, claims that there are.

In fact, he thinks that Hume's denial that there were such claims is itself an example of one.

Another example is that every event has a cause.

Indeed, Kant thinks that synthetic *a priori* judgments are the most interesting and important ones in philosophy.

Kant argues that all the theoretical sciences contain synthetic *a priori* judgments as principles. [pp. 643ff.]

In Mathematics: That '7 + 5 = 12' is synthetic: "… the concept of the sum of 7 and 5 contains nothing more than the union of the two numbers into one; but in (thinking) that union we are not thinking in any way at all what that single number is that unites the two. In thinking merely that union we are not thinking in any way at all what that number is that unites the two." [p. 643]

In Geometry: "That the straight line between two points is the shortest is a synthetic proposition. For my concept of straight contains nothing about magnitude, but only a quality." [p. 643]

In Natural Science: "… in all changes in the corporeal world the quantity of matter remains unchanged … in all communication of motion, action and reaction must always be equal." [p. 643]

In Metaphysics: "The world must have a beginning." [p. 644]

Note: There may be a problem for Kant here.

Suppose that whenever we add 7 and 5 oranges together we get 13. How can we maintain that the claim that 7 + 5 = 12 is a priori? Kant seems to be suggesting that it is necessarily and universally true, but not true in virtue of its meaning. But then how can it be true? Doesn't he have to reject it as false? The correct alternative seems to be to say that the claim is analytic but that these oranges are no good for counting. *More generally, Kant seems to be conflating truths of mathematics with truths of science. Moreover, Geometry is now subdivided into pure and applied. Euclidian Geometry is governed by its axioms. It is analytic. There are, however, other geometries. They are also analytic. The issue of which geometry works in our world is a question about which geometry we should apply. This is a synthetic issue.*

# III. Transcendental

By '**Transcendental'** he means knowledge about our having knowledge.

It does not mean *transcendent* (i.e., beyond experience).

A **transcendental deduction** has the form: Only if A is B possible. B is possible. Therefore A must be the case.

Though he agrees with the Empiricists that there can be no knowledge without experience, he disagrees with their view that all knowledge is of experience. For Kant, as for the Rationalists, the mind is active in knowledge.

Kant sometimes refers to his own views as transcendental. He also instead sometimes uses the word 'critical'. His is a transcendental philosophy or a critical philosophy. It is not, however, a philosophy that is transcendent.

# IV. Phenomena, Noumena, and the Copernican Turn

In pre-Kantian philosophy the world and objects in it were treated as something outside of and distinct from our knowledge of them. If a subject knows an object the explanation for that knowledge lies ultimately in the object. Kant, in contrast, maintains that the constitution of objects is largely determined by the subject.

In pre-Kantian philosophy the question was "Is knowledge possible?" Kant, instead, asks "How is knowledge possible?"

Kant wants to know how the world is for us (**phenomena**) and not how it is as a thing-in-itself (**noumena**).

"To suppose the objects must conform to us is to reverse the customary direction of explanation of knowledge. In the realist scheme, the arrow of explanation runs from the object to the subject: if a subject S knows an object O, then the explanation for S's representing O lies ultimately in O's being the way it is; had O not existed or been otherwise, S wouldn't have represented O or would have represented O differently. Kant reverses the arrow; the deepest, and most abstract and encompassing explanation of representation lies in how S is. The constitution of objects is thus determined at the most fundamental level by the subject. And it is a corollary of this pattern of explanation that the subject is active in knowing objects." [Gardner, Kant and the Critique of Pure Reason, p. 41]

# KANT'S *CRITIQUE OF PURE REASON*

The main thesis is that reason can know things that lie within experience, but not know anything lying outside of experience. Reason is legitimate when applied to the materials provided by experience but it comes into conflict with itself and becomes illegitimate when it parts company with experience.

We can know what things are like as appearances (phenomena) but not what they are like in themselves (noumena).

Transcendental Idealism asserts that our knowledge must conform to objects. The thing in itself (i.e. the object that is independent of our knowledge of it) can't be known. We know only appearances, and we know them only in terms of our representations.

The general problem of the *Critique* is to determine how synthetic judgments *a priori* are possible. It is divided as follows:

I. **The Transcendental Doctrine of the Elements:**

**a. The Transcendental Aesthetic** in which Kant examines the faculty of Sensibility (mathematics and geometry) and its Intuitions (space and time). Here Kant attempts to answer the questions "How is pure mathematics possible?" and "How is pure natural science possible?"

**b. The Transcendental Logic:**

1. **The Transcendental Analytic** in which Kant examines the faculty of Understanding (metaphysics of experience and principles of natural science), and its Concepts and Principles (e.g., substance, causality, etc.). Here Kant attempts to answer the question "How is metaphysics as a natural predisposition possible?"
2. **The Transcendental Dialectic** in which Kant examines the faculty of Reason (transcendent metaphysics), and its Ideas (the soul, God, freedom). Here Kant attempts to answer the question "How is metaphysics as a science possible?" His answer is that it isn't.

i. Paralogisms of Pure Reason (categorical) – Psychology – Soul

ii. Antinomies of Pure Reason (hypothetical) – Cosmology – Cause - Freedom

iii. The Ideal of Pure Reason (disjunctive) – Theology – God

II. **The Transcendental Doctrine of Method:** Deals with reflections on the methodology of the *Critique*.

# THE TRANSCENDENTAL AESTHETIC

# THE ARGUMENT IN THE *CRITIQUE*

To find the synthetic *a priori* objects of intuition Kant needs to subtract the *a posteriori* elements of it (viz., those that are not necessary, not universal, and dependent on experience), and he needs to subtract the concepts that the understanding contributes (viz., the concepts).

Bennett's Analogy: "A submarine captain wears sun-glasses all the time and sees beyond his submarine only through a slightly defective periscope: everything he sees looks green, and everything he sees outside his vessel looks blurred as well."

Suppose I have an intuition of an object. What belongs to it as a sensation includes its impenetrability and hardness (if I'm feeling it), its color (if I'm looking at it), and its shape (insofar as it appears as a two-dimensional object). The understanding thinks in it substance (it's a material thing), divisibility (it can be divided in thought), etc. But what remains is its extension and shape (as a four-dimensional thing). These belong to pure intuition.

Kant now wants to show that space and time are *a priori* but not concepts. He provides four arguments. The first two are supposed to establish that they are *a priori*, while the second two are supposed to show that they are not concepts, but intuitions. They are directed primarily against Leibniz's relativistic view. (pp. 647f.)

Note: We will skip his arguments about time, which are analogous to those about space, and focus only on the latter.

***A.*** Space is not an empirical concept that has been derived from outer experience. It is presupposed by experience. A representation of space is necessary in order for me to be aware of things separate from me and separate from one another.

"The representation of space must already be presupposed in order for certain sensations to be referred to something outside me…." [p.647]

Note: Leibniz's Identity of Indiscernibles says that if "two" things share all of their internal properties then they are one thing; but Kant protests here that in order for me to know whether or not they share their properties I first have to know whether they are numerically one or two. (Ouch!)

***B.*** Space is prior to appearances (i.e. to things in space). We can represent space without objects, but not vice versa. (Note: This is not a psychological argument. It is an epistemic argument.) This is what we do in geometry. But objects without space are inconceivable because to be different they need to be in space.

***C.*** Space is a singular intuition. We can represent only one space. It is an individual and not a concept. The space/spaces relation should be viewed as a whole/part relation, and not as a relation between a concept and its instances. Unlike things in space, space is given as an unbounded magnitude. I have to start with the pre-intuition of space's wholeness before I can have an intuition of particular spaces. So space is not to spaces as a house is to its bricks.

There may seem to be a potential problem here (raised by Quinton):

Suppose when we fall asleep each night we meet the same characters in the same environment interacting with one another in ways much like the people in real life are now doing. Mightn't we say that we have experience of two incongruous Spaces? And doesn't this refute Kant's view that we can represent only one space?

Gardner responds to this by saying: "To the extent that fictions make the notion of non-unitary space intelligible, they do so on the basis of inference and conceptual extrapolation, whilst presupposing our ordinary intuitive grasp of space, in which it is given to us as unitary." [p. 78]

But this seems to miss the point. Gardner supposes we already have a notion of one space and then imagine something else. If we were born in the situation described above, we would have no reason for suggesting that one of the spaces was real and the other only an imagined one.

So Kant's claim in 3 above is not *a priori*.

But the response is that Kant is not talking about a metaphysical impossibility but of an epistemological one.

***D.*** Space cannot be a concept because, though a concept might have an infinite number of representations (i.e. denotations), no concept can be thought as containing an infinite number of representations (i.e. connotations. E.g. 'apple' → 'color' → 'red' can't go on forever or the word would have no meaning), but space is infinitely divisible in exactly this way.

While these arguments are directed primarily against Leibniz's relativistic view, it is important to note that Kant's view here also differs from Newton's. Newton thought that space and time are things in themselves. For Newton, God is always and everywhere, and by existing always and everywhere he exists substantially. In him all things are contained and moved. They are his sensorium. But this makes them things in themselves. Kant wants to say that they are, rather, preconditions of our knowing, and we can't know what they are, if anything, in themselves.

**The Neglected Alternative**: Some authors have asked why our notions of space and time couldn't also apply to them as things in themselves. Why can't our notions of space and time correspond to reality?

But for Kant, though this view is coherent, it is empty. The thought is one we can't get an intelligible grip on.

His "psychology," though transcendental, is not transcendent

We will return to this issue after we have examined the arguments above in more detail and two further arguments Kant presented elsewhere.

# MATTEY'S ANALYSIS OF THE ARGUMENTS IN THE *CRITIQUE*

**The Argument for *A* Unpacked and Criticized:**

P1) Suppose space is an empirical concept.
P2) If C is an empirical concept, then anyone with the concept C abstracts it from experience of objects to which it refers.
C1) So, anyone with a concept of space abstracts it from experience of objects to which it applies.
P3) I have a concept of space.
C2) So, I abstract the concept of space from my experience of objects to which it applies.
P4) If I abstract the concept of space from my experience of objects to which it applies, then I abstract it from my experience of objects presented as standing in spatial relations to me and to one another.
C3) So, I abstract the concept of space from my experience of objects presented as standing in spatial relations to me and to one another.
P5) If objects are presented as standing in spatial relations to myself and to one another, then they are presented to me in relation to space itself.
P6) If objects are presented to me in relation to space itself, then there is a presentation of space itself independently of the objects of experience presented in relation to it.
P7) If there is a presentation of space itself independently of that of the objects presented in relation to it, then the presentation of space is not abstracted from the objects of experience presented in relation to it.
C4) So, the presentation of space is not abstracted from the experience of objects related to it.
C5) So, space is not an empirical concept.

Given that this argument is valid, the question is whether it is sound. The substantive claims in the argument are found in premises 2, 4, 5, 6 and 7.

While any of these five conditionals might be disputed, premise 5 seems the least obvious. In effect it precludes a relative concept of space which is based on internal characteristics of objects, as on Leibniz's view. Kant appears to be taking the side of Newton here in claiming that space itself is the basis of all spatial relations. It does seem that Newton's concept of space is not an abstracted one, but instead is a theoretical concept invoked to explain the spatial relations we discover in experience.

If the presentation of space is not an empirical concept, there are still several alternatives open. It might be an *a priori* concept. Or the presentation of space might not be a concept at all, but an intuition instead. If it is an intuition, it might be an empirical intuition or an *a priori* intuition. So the next step is to establish that whatever kind of presentation it is, the presentation of space is *a priori*.

The argument for this conclusion is given in premise 2. Once again, we will present it in a step-wise format.

**The Argument for *B* Unpacked and Criticized:**

P1) If D is presented as a determination of object O on the basis of experience, then O can be presented without determination D.
C1) So, if being in space is presented as a determination of an outer object O on the basis of experience, then O can be presented without being in space.
P2) But no outer object can be presented without being in space.
C2) So, being in space is not presented as a determination of an outer object O on the basis of experience
P3) Outer objects O are presented as being in space.
P4) If an object O is presented as having a determination D, then D is presented as a determination of O either *a priori* or on the basis of experience.
C3) So, space is presented either *a priori* or on the basis of experience.
C4) So, space is presented *a priori*.

We can take premises 2, 3 and 4 to be relatively uncontroversial. This leaves us with premise 1, which seems false. If D is a necessary characteristic of an object, as standing in spatial relations would be for outer objects, then the object cannot be presented without characteristic D.

“So, the fact that "we can never have a presentation of there being no space" [A24/B38] does not imply that the presentation of space is not based on experience. Now Kant might object and say that we could never know by experience that we can never have a presentation of there being no space, so that the fact that all presentations of outer objects are in space is known *a priori*. But I would then point out that this claim is analytic: it follows from the concept of an outer object that an outer object must be presented in space. In fact, even for Kant, not all objects must be in space: the ‘empirical self’ that is the object of ‘inner intuition’ is not in space.” [Mattey]

**The Argument for *C Criticized*:**

Here Kant had argued that space is not a concept because concepts are capable of many instantiations—e.g., many things can be red—whereas we can conceive of only one space.

But Mattey objects here that “The difference separating concepts from intuitions is that intuitions present objects directly, while concepts present them indirectly through common characteristics. So it is irrelevant how many objects fall under the presentation of space, i.e., whether or not ‘space is essentially one.’ And it is irrelevant that what we call ‘spaces’ are parts of one space rather than objects falling under a general concept of space.”

He also mentions that even on Kant’s own view the concept of God has only one instantiation, yet it is a concept nonetheless.

**The Argument for *D Criticized*:**

Here Kant argued that since a concept could never contain an infinite multitude of presentations within itself, but space does, it cannot be a concept.

But Mattey objects that "This argument is faulty as well as the other three. Suppose we do present space as an infinite given magnitude. The most plausible reading of this claim is that space itself, what is presented by the presentation (whether concept or intuition), is infinite in one way or another. Although each of the infinitely many parts of space can be presented individually, this does not mean the presentation itself contains infinitely many partial presentations. So the fact that a concept is not divisible in the way that space is does not mean that it cannot present a single object which is divisible in this way."

# TWO FURTHER ARGUMENTS

***E.*** **The Argument from Incongruent Counterparts**: There is no discursive way to explain the difference between a left-handed and right-handed glove. So our understanding of it cannot be captured in terms of concepts. It is just a question of spatial orientation. "What can be more similar to my hand and to my ear in every respect and in every part than their images in a mirror? And yet I cannot put such a hand as is seen in the mirror in the place of its archetype; for if this is a right hand, the one in the mirror is a left hand and the reflection of the right ear is a left one that can never serve as a substitute for the other." [p.593]

***F.*** **The Argument from Geometry:** The Transcendental Exposition of the Concept of Space [p. 648]: Geometry makes synthetic *a priori* judgments about space. If it just manipulated concepts it would be analytic. It isn't because it uses the intuitive element in constructing proofs—we need to draw the pictures—and the concept of space as a synthetic *a priori* concept makes comprehensible the possibility of geometry because it explains this intuitive element.

# THE ANTINIMONY AND THE NEGLECTED ALTERNATIVE

***What does Kant's argument show about things in themselves?***

"Space represents no property whatsoever of any things in themselves, nor does it represent things in themselves in their relation to one another. That is, space represents no determination of such things, no determination that adheres to objects themselves and that would remain even if we abstracted from all subjective conditions of intuition." [p. 648]

Is Kant here saying that things in themselves are not in space and time, or only that we cannot know that they are/are not in space and time? The former view can be labeled 'The Distortion View,' since appearances distort things in themselves. The latter view was suggested by Trendelenburg who said that,

"… even if we concede the argument that space and time are demonstrated to be subjective conditions which, in us, precede perception and experience, there is still no word of proof to show that they cannot at the same time be objective forms."

The normal view is that Kant holds the Distortion View. Does he? If so, why? Is he right? And why is this issue important?

If Trendelenburg's objection is correct, in showing that space and time are subjective Kant has not managed to show that they are not real existences, because they might be both, and this view, which might be called "Transcendental Realism," conflicts with Kant's claim that they cannot be both.

Kant does, however, present arguments elsewhere in the *Critique* that will, if correct, refute this view. In the *"Antinomy of Pure Reason"* he maintains that if we suppose space and time to characterize things in themselves, we are committed to affirming that the world is unlimited in space and time and that it is also limited in space and has a beginning in time.

Note: In the *Dialectic* Kant tries to show what happens when thought attempts to go beyond experience. He tries to establish that although thought about non-empirical objects is possible, it exceeds the bounds of knowledge. In the process it produces concepts of its own which are unconditional totalities of absolute unities. The *Paralogisms* deal with that branch of metaphysics (Rational Psychology) that claims to be able to know that the self or soul is an indivisible immaterial substance. The *Antimonies* deal with Rational Cosmology and its claims to be able to know things about unconditioned causes. And the Ideal of Pure Reason deals with Rational Theology and its claims to be able to know things about necessary beings (viz., God).

A *Paralogism* is simply an invalid syllogism. An Antinomy is a pair of valid syllogisms with contradictory conclusions.

There are four *Antinomies*. The first two, often referred to as *Mathematical Antinomies*, are concerned with quantities and deal with the relation between sensible objects in the world and space and time. The third and fourth *Antinomies*, on the other hand, are concerned with causality and existence. Only the first two are relevant here.

**The First Antinomy (from Mattey's reconstruction):**

*The Thesis (The Dogmatist's Argument):*

P1) Suppose the world has no boundary in space.
P2) If the world has no boundary in space, then beyond any object of finite size in space there a further object.
C1) So, beyond any object of finite size in space there is a further object. [P1& P2]
P3) An object is given or synthesized in space if and only if it is of finite size.
C2) So, beyond any given or synthesized object in space, there is a further object. [C1 and P3]
P4) If there is a further object beside one given or synthesized in space, then it is synthesized.
C3) So, beyond any given or synthesized object in space, there is a further object that is synthesized. [C2 and P4]
P5) If beyond any given or synthesized object in space, there is a further object that is synthesized, there is a synthesis of infinite length.
C4) So, there is a synthesis of infinite length. [C3 and P5]
P6) A synthesis of infinite length cannot be completed.
C5) So, there is a synthesis that cannot be completed [C4 and P6]
P7) An uncompleted synthesis is impossible.
C6) So, the world has a boundary in space.

*The Antithesis (The Skeptic's Argument):*

P1) Suppose the world has a boundary in space.
P2) If the world has boundary in space, then there is an empty space beyond the boundary of the world.
P3) If there is an empty space beyond the boundary of the world, then the world is related to that empty space.
P4) If the world is related to something, then that to which it is related is an object.
C1) So, empty space is an object. [from P1-P4]
P5) Empty space is no object.
C2) So, the world has no boundary in space.

According to Mattey's interpretation, Kant's complaint here is that the Thesis postulates a boundary to the world although this is incompatible with the conditions of experience; while the Antithesis cannot perform an infinite regress. "In both cases the world is treated as a thing in itself rather than the sum-total of appearances. The assumption is that the world-series is 'given wholly,' rather than being the product of successive synthesis. If we keep the concept of the world within its proper bounds, we can say instead that the magnitude of the world is indefinite."

So, if Kant is right, Transcendental Realism is ruled out and Trendelenburg's criticism of the Neglected Alternative has been answered.

Modern Physics contends that the world is unbounded, and if that is correct then I take it that the dispute Kant references here simply doesn't arise, at least with respect to space.