

## Part IV

# Conclusion: The Kantian Synthesis



# Chapter 10

## Kant: The Copernican Revolution

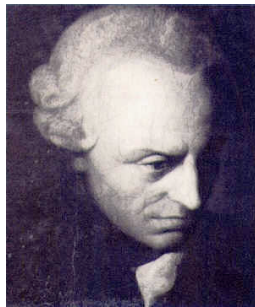


Figure 10.1: Kant

### 10.1 Homework

- Readings: Readings: Kant, *Critique of Pure Reason*, Prefaces and Introduction
- Study Questions:
  1. How does Kant characterize the secured path of a science? Explain with the examples of Logics, Mathematics, and Physics.

2. Why does Kant think that metaphysics has not entered the secured path of a science? What does he propose as a remedy? How is his proposal analogous to the revolutions that occurred in mathematics and physics?
3. What will be the effect of Kant's revolution on the discipline of metaphysics? What will be the seemingly detrimental effects? What will be the positive effects?
4. What does Kant mean by "critical method"?
5. What is the distinction between knowledge a priori and knowledge a posteriori? What is the distinction between analytic judgments and synthetic judgments? What are a priori synthetic judgments?
6. What kind of metaphysics does Kant think is possible and legitimate? What kind of metaphysics does Kant think is not possible or legitimate?

## 10.2 Introduction: Life, Work and Philosophy

### Kant's Life :

- Kant (1724-1804) born in Königsberg, studied in Königsberg, died in Königsberg – not much of travelling
- Very modest background. One of the few philosophers who had to struggle with money.
- Notoriously calm and regular life – A perfect German Professor, and "The philosopher's walk".

That said: he took pleasures in life (he was not the kind of ascetical person that some will tell you he was) – dinner party every Thursday !

He changes his schedule once, when he was waiting to hear from the French Revolution.

- Supposed last words: "Es ist gut" (this is good)

### Kant's main works :

- Wrote the three *Critiques* (of Pure Reason, of Practical Reason, of Judgement) (K1, K2 and K3), thus founding one of the most important systems of philosophy
- also:
  - *Prolegomena to any Future Metaphysic* less technical version of K1
  - *Grounding for the Metaphysics of Morals* less technical version of K2
  - *Religion within the Limits of Reason Alone*
  - and some *Opus posthumum* in which he presents, among other things, his philosophy of history.

#### **Kant's philosophy in a nutshell :**

- The essential notion of "Critique": the object of philosophy is to find out the conditions of a legitimate use of reason.  
The entirety of philosophy thus consists in answering one main question: what can reason achieve?  
Such a question divides in :
  - 1 What can I know?
  - 2 What should I do ?
  - 3 What can I hope?
 And all these form the various facets of the overall question : What is man? which is also the question of our finitude.
- Epistemology and Metaphysics:
  1. Criticism of both speculative, dogmatic metaphysics and skepticism
  2. Reconciliation rationalism and empiricism – the "Copernican Revolution" : change of viewpoint

## **10.3 A new of conception of philosophy**

### **10.3.1 Metaphysics**

#### **The natural tendency towards metaphysics**

- The most important question for Kant: Is metaphysics possible?

- Dogmatic Metaphysics: aimed at gaining knowledge about objects beyond experience: the fundamental constituents of the world, God, Freedom, and the Immortality of the soul.

→ *There is a natural tendency toward such metaphysical issue, which is impossible to deny, and of which we need to make sense.*

### The failure of Dogmatic Metaphysics

- Logic (Aristotle), Mathematics (Euclid), and Physics (Newton) have each reached the “secured path of a science”

Aristotle realized that logic could be a science if one reasoned in the most abstract way. That said, logic is only a preparation for science

Euclid understood that mathematical truths are not to be found in figures, but that figures should be constructed on the basis of our reasoning – Reason is leading the process, not figures.

Finally, Newton understood that physical truths are not to be found in the mere observations of empirical data. Instead, reason should lead again, and “interrogate” nature with some principles in one hand, and experimentation in the other.

Note: true experimentation differs from mere observation: an experimentation is constructed by reason.

- How do we recognize that a discipline has indeed reach such a path? Criteria of truth and the possibility of consensus.
- Metaphysics: a mere battle ground – no consensus, no means of reaching a consensus, no progress

By contrast to mathematics and physics, here is no means, within metaphysics as a discipline, to settle a controversy.

### How can metaphysics be a science?

At this point, one could be tempted by skepticism: no metaphysical truth is attainable.

Kant rejects this option, and instead, proposes to change the way in which we do metaphysics.

The idea is that, if we understand how mathematics and physics can be sciences, then we'll be able to apply this to metaphysics.

—→ *Kant rejects both the dogmatic forms of metaphysics and skepticism. The idea is then to understand the real sciences in order to figure out to what extent it is possible to make metaphysics a science.*

### 10.3.2 The Critical Method: The Tribunal of Reason and Copernican Revolution

#### The Critical Method and the Tribunal of reason

The new discipline that Kant invents, the “Critique” or “Critical Method”. Kant’s critical method does not aim at giving us new knowledge about new particular objects but tries to systematically determine the conditions of the proper use of reason.

- Kant’s Critical Method

#### **Definition 24 – Kant’s Critical Method**

*The Critique, or Critical Method is the self-examination of reason aiming at systematically determining the boundaries of its proper use. That is to say, the critical method deals with the necessary and sufficient conditions of a legitimate use of reason – scientific inquiry being a paradigmatic case of a legitimate use of reason.*

- Kant uses the image of a “tribunal of reason” (Prefaces)

Kant lives in a century in which the legitimacy of all powers (political and religious in particular) is put into question. The power of reason should be submitted to the same critical investigation.

- What the critique will bring about:
  - Negative side: The critique will reveal the limits of human reason, and forbid that reason be used beyond the realm of experience. In particular, Kant will argue that we must give up on the issues of the fundamental constituents of the world, the existence of God, the problem of free will, and the immortality of the Soul, to which reason is unable to give satisfactory answers

- Positive side: That these issues are not within the reach of our reason leaves room for faith. The critique does not say that the external world, God, Freedom or the Soul don't exist (of course not), it just says that our reason is inadequate to deal with these issues, and that, accordingly, no science of these object is possible. What remains is faith.

This is the meaning of the well know phrase, at the end of the Preface to the second edition:

I therefore had to deny *knowledge* in order to make room for *faith*.

—→ *The new kind of philosophy that Kant proposes, the critique or critical method, aims at determining the boundaries of the legitimate use of reason – in particular of pure reason. Such a critique will show that some of the big “metaphysical” issues fall outside of the domain of the legitimate use of pure reason.*

### The Copernican Revolution

How is the new metaphysics going to proceed in order to determine the limits of reason? What is the positive method which Kant proposes?

- There a common feature in the success of all sciences (math and physics), and this common feature is that, at some point of history, reason was taken as the leader instead of the follower:
  1. Math: Figures vs reason
  2. Physics: experience vs experimentation
- Kant's idea is to engage metaphysics in the same kind of change of viewpoint, hence a kind of Copernican Revolution

Copernic: the planets do not orbit around us, it is us who are orbiting

Kant: our knowledge does not conform to the external objects, it is the objects which conform to our knowledge!

That is to say that we are an active part of the process of knowledge: what we take to be reality is partly constructed by our cognitive process. And knowledge is possible only because the external object actually conform to our ways of constructing / interpreting them.



—→ *The new kind of metaphysics thus consists in determining the cognitive framework which we use in order to apprehend the world, be it immediately (through our intuition) or immediately (through our concepts).*

- This leads to a new definition of *objectivity*:

Instead of the two steps process:

1. The external objects exist
2. Our knowledge must conform to these objects in order to be objective and true

We have know a single step process: *Objectivity is constructed, i.e. the result of how our cognitive framework build our sensory and intellectual apprehension of the external objects.*

- By definition, such a framework is independent of all experience: it is a priori, and the discipline which deals with it is also a priori.

—→ *The sole legitimate role of pure reason for metaphysics is to determine the a priori framework through which we apprehend the world, in other words, to determine the conditions of objectivity.*

### 10.3.3 The problem of synthetic a priori judgments as the fundamental problem of reason

We have seen that the discipline of metaphysics is understood by Kant in a new way, that is to say, as the critical investigation of the legitimate use of reason. Scientific knowledge being a paradigmatic case of such a legitimate use of reason, one important aim of the Critique is to determine the condition of possibility of scientific knowledge. But what is scientific knowledge?

#### Definitions

One needs to make clear the two distinctions: a priori / a posteriori and analytic / synthetic

- The distinction between a priori and a posteriori is a distinction between *ways in which we know*: independently of experience of not

**Definition 25 – A priori – Kant**

*Something is said to be a priori if and only if it does not derive from experience. The forms of our intuition will be a priori*

**Definition 26 – A posteriori – Kant**

*Something is said to be a posteriori if and only if it derives from experience. A posteriori is synonymous with empirical.*

- The distinction between analytic and synthetic is a distinction between *kinds of truth*

**Definition 27 Analytic Judgment**

*A judgment is said to be analytic if and only if the predicate is contained in the subject. A paradigmatic example is: ‘A bachelor is not married’*

**Definition 28 Synthetic judgment**

*A judgment is said to be synthetic if and only if the predicate is *\*not\** contained in the subject. A synthetic judgment brings something new to the subject: ‘Jalisco is black’.*

**From Hume to Kant: the question of a posteriori synthetic judgments**

- In taking that all knowledge comes from experience, Hume and other empiricists had taken that:
  - All a priori judgments are analytic: they are tautologies
  - Converse: All synthetic judgment are a posteriori: only from experience can we learn something informative .

Kant wants to deny that the two distinction above match in such a clear cut way.

- The existence of a priori analytic judgments and a posteriori synthetic judgments cannot explain the existence and fruitfulness of the sciences of mathematics and physics:
  - Analytic a priori judgment are close to be tautological. There is no mystery about them, but there is no way in which such judgments could be constitutive of the sciences. This is because sciences are informative while such judgments are not

- Synthetic a posteriori judgments are not mysterious either: we learn from experience all the time – for example, that Jalisco is black. That said, judgments which derive from experience alone lack the *universality and necessity* which are constitutive of scientific judgments.

- How then can we explain that the sciences exist?

The argument is the following:

P1 The sciences exist

P2 Analytic a priori judgments and synthetic a posteriori judgments do not allow us to attain scientific knowledge

CC There must be another kind of judgment, which allows for scientific knowledge

→ Against Hume, Kant's main claim is that **synthetic a posteriori judgment** are constitutive of scientific knowledge

→ *In order to answer the main question of philosophy – how is metaphysics possible? – we thus need to answer a new question in the light of the analysis above: **how are synthetic a priori judgments possible?** This is the **the fundamental question of pure reason** to which the Critique of Pure Reason is entirely devoted.*

## 10.4 The New Method Applied: The Conditions of Possibility of Knowledge

### 10.4.1 Conditions of knowledge, conditions of experience

- As we have seen, the Critique aims at determining the conditions of possibility of scientific knowledge, that is to say, the conditions under which objectivity is constituted.
- The idea is that *scientific knowledge is possible just because the external objects conform to our cognitive framework, whatever they are beyond the way in which we understand them.*

In order to determine how science is possible, we need to determine the framework through which we construct our experience of the external objects.

- Our knowledge of an object is made of two parts:
  - a part which comes from the object in itself : the *matter* of our knowledge of the object
  - a part which comes from us: the *form* of our knowledge of the object

What the critical philosophy can do: determine what are the forms of knowledge

- The form of our knowledge of an object has in turn two parts:
  - Intuition coming from our sensitivity – sense perception
  - Concepts coming from our understanding

Kant: “Concepts without intuition are empty; intuitions without concepts are blind.”

- Note on vocabulary:
  - Noumenon (pl: noumena): the external objects as they are beyond our experience
  - Phenomenon (pl: phenomena): the external object as they are constituted in our experience

—→ *We want to determine the forms of our apprehension of the world – the forms of our intuition and the categories of our understanding*

### 10.4.2 Forms of the Intuition

What are the forms of our intuition, i.e, of our sense perception? Space and Time: that is to say, the world appears to us within a spatio-temporal framework

- Such a spatiotemporal framework does not exist in the “things in themselves”.
- Rather, space and time are the elements of the framework through which we build our sense perception (in Kant’s words: our empirical intuition)
- This is not saying that they are mere appearances: the existence of mathematics, of geometry in particular, and the possibility of apply geometry to our empirical intuitions show space and time possess some kind of objectivity in the Kantian sense.

—→ *Space and Time are neither properties of the external objects, nor abstract concepts, nor illusions of our minds, but rather the necessary and objective forms of our sense perception.*

### 10.4.3 Categories of the Understanding

As we have seen, not only our intuition, but also our ways of conceiving, constitute the framework of our apprehension and knowledge of the world. Our ways of conceiving are mainly the *Categories* of the understanding.

- The categories of the understanding constitute the conceptual framework through which we grasp the world
- Kant distinguishes 12 categories (see the table p. 657 in your book). Among the most important ones are the categories of substance and causality.

- That is to say, according to Kant, the notion of substance are neither in the things in themselves, nor only in our minds. Rather, they are the framework within which we constitute the world as we understand it.
- As the forms of our intuitions, the categories of our understanding are objective in the Kantian sense – as conditions of possibility of knowledge.
- The principle of permanence (substance) and of causality inform our understanding of the world. It is true, as Hume suggested, that the notions of cause and effects do not derive from experience. In fact, the notions of cause and effect are the ways in which we frame the world as it appears to us – the phenomena.

—→ *The categories of our understanding frame the way in which we constitute our experience. Causes and substances are not in the things in themselves. Nor are they illusions of our minds. Instead, they are elements of the framework which is necessary for us to make sense of the world.*

#### 10.4.4 Ideas of Reason

- Pure reason has nothing to say beyond experience. So, the sole a priori knowledge that is attainable for metaphysics is about the forms of our intuition and understanding, that is to say, the a priori framework through which we constitute our experience.
- That said, it is natural to our reason to tend to go beyond our experience. Besides our experience (intuitions + concepts), our reason posits *ideas* which do not correspond to a proper mix of intuitions and concepts.
- Among these ideas, we find the idea of absolute Self, Substance, Cause (God), and Freedom. None of these corresponds to anything in our experience and are the result of our reason going astray.
- When reason tries to deal with these ideas, it comes into conflict with itself: arguments for both sides of the issue at hand exist, and there is no way out of the controversy. This is what Kant calls the *antinomies* of reason.

- Among such antinomies, we find the issues of:
  - whether freedom is compatible with causal necessity or not
  - whether space is infinitely divisible or not
  - whether the cosmos is infinite or not
  - whether God exists or not

For all these issues, perfectly valid arguments can be made on both sides. And reason is lost.

—→ *In trying to use reason in order to answer these big questions, we misuse our reason. The issues belong to the domain of faith, not knowledge.*

## 10.5 Conclusion

- Kant: a methodological revolution in metaphysics and epistemology which aims at settling down the controversy between empiricists and rationalists, between skeptics and dogmatics
- Kant's revolutionary idea is to change our point of view: instead of thinking that knowledge arises from the fact that our cognition conforms to the external objects, he proposes that knowledge arises from the fact that the external objects conform to our cognition
- Metaphysics is restricted to the determination of the conditions of possibility of knowledge, that is, the conditions of possibility of objective experience, or again, the a priori framework through which we constitute our experience.
- Such a priori framework is made of the forms of our intuition (space and time) and the categories of our understanding (among which the categories of substance and causality)
- Everything else, and in particular the question of the true nature of the things in themselves, of man and of God, is unattainable for our reason. They pertain to the domain of faith, on which the principles of our action will be based.

