

# Chapter 10

## Kant: The Copernican Revolution

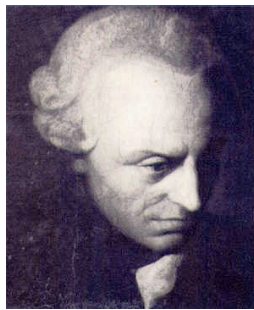


Figure 10.1: Kant

### 10.1 Homework

- Readings:
  - Kant, *Critique of Pure Reason*, Preface A and b and Introduction (selections in your book)
  - *Prolegomena*, paragraphs 6-13 (First edition: pp. 590-596 / Second edition: pp. 673-679)
  - *Prolegomena*, paragraphs 14-21 (pp. 596-601 / pp. 679-684) and 27-35 (pp. 604-608 / pp. 687-690)

- *Prolegomena*, paragraphs 40-56 (pp. 612-623 / pp. 695-706)

- Study Questions:

1. How does Kant characterize the secured path of a science? Explain with the examples of Logics, Mathematics, and Physics. Has the discipline of metaphysics entered such a secured path of science according to Kant? Explain.
2. What is Kant's "critical method"? What will be the seemingly detrimental effects of the application of the critical method to metaphysics? What will be the positive effects? Which kind of metaphysics is legitimate according to Kant?
3. Kant propose a change in viewpoint in metaphysics which is comparable, according to him, to the change in viewpoint that Copernic proposed in physics. Explain what such a change in viewpoint consist in.
4. What is the difference between analytic judgments and synthetic judgments? What is the difference between a priori and a posteriori judgments? What is Kant's argument in favor of the thesis that the sciences contain synthetic a priori judgments?

## 10.2 Introduction: Life, Work and Philosophy

### Kant's Life :

- Kant (1724-1804) born in Königsberg, studied in Königsberg, died in Königsberg – not much 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, well known for good conversation.

He changed 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 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 the rationalists’ speculative, dogmatic metaphysics and Hume’s skepticism
  2. Reconciliation rationalism and empiricism – the “Copernican Revolution” : change of viewpoint

## 10.3 A new of conception of philosophy

### 10.3.1 The Problem of Metaphysics

#### The natural tendency towards metaphysics

- One of the most important question for Kant: Is metaphysics possible as science?
- It is an important question because there is a *natural tendency* toward metaphysics, which is impossible to deny, and of which we need to make sense.
- Most of the metaphysical doctrines fall under the category of Dogmatic Metaphysics: they aim at gaining knowledge about objects beyond our experience: the fundamental constituents of the world, God, Freedom, and the Immortality of the soul.
- Kant's concern is then to assess whether such inquiring into such questions is a legitimate use of our reason, or whether it is doomed to failure.

#### The failure of Dogmatic Metaphysics

- Logic (Aristotle), Mathematics (Euclid), and Physics (Newton) have each reached the “secured path of a science” in letting reason lead the way:

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. True experimentation differs from mere observation in the sense that an experimentation is constructed by reason.

- How do we recognize that a discipline has indeed reach such a path?
  - (1) The discipline provides criteria of truth
  - (2) The discipline reaches a consensus
- Metaphysics: a terrible 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 because no clear criteria of truth is given.

### How can metaphysics be a science?

- At this point, one could be tempted by skepticism. One would thus surrender to the idea that 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 turn metaphysics into 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 21 – *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, which he compares to the 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 now a single step process: *Objectivity is constructed, i.e. it is 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.

To determine such a framework is the role of the critical method, the legitimate version of metaphysics.

—→ *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 or not

#### Definition 22 – 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 23 – 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 24 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 25 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 judgment 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 priori judgments** are constitutive of scientific knowledge

→ *So, true science is possible thanks to the existence of a priori synthetic judgments. Accordingly, the main question of philosophy – how is metaphysics possible? – turns into a new question: **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.*