



Kant

A Middle Ground



Overview

01

Failure of
Foundationalism

02

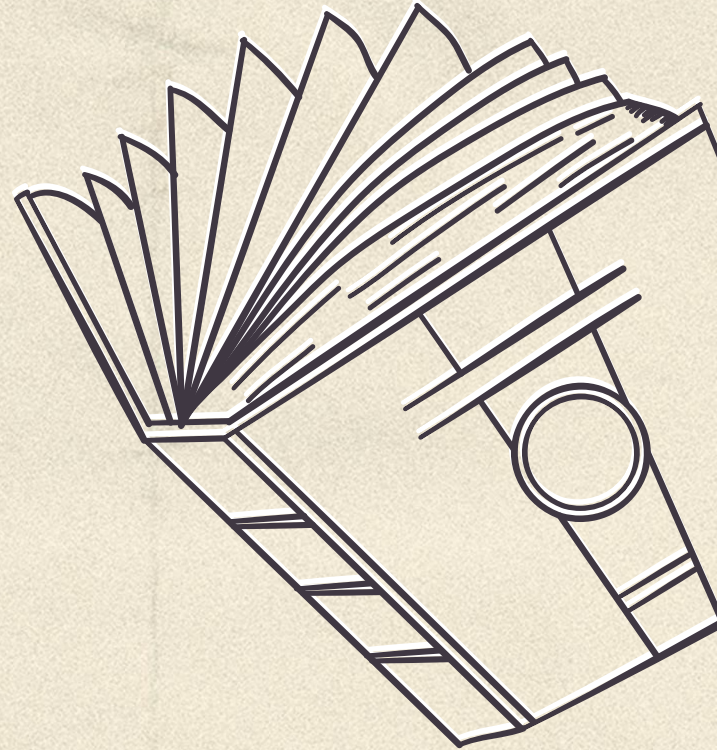
Kant's
Copernican Turn

03

Strengths

04

Weaknesses





01

Failure

Failure of Foundationalism



- Rationalists – able to provide absolutely certain knowledge (mathematics, analytic a priori truths and transcendental arguments)...
- But **very little**
- Empiricists – able to provide quite a bit of knowledge...
- But only if we allow **uncertainty** into the system
- Hume threw the whole of Newtonian Science into doubt with his attack on causation and induction
- End result? Scepticism reigns!



“

I freely confess: it was the
objection of David Hume which
first, many years ago,
interrupted my dogmatic
slumber

”

—Kant (Preface to his *Prolegomena to
Any Future Metaphysics* 4:260)



02

Turn,
turn,
turn!



Kant's Disagreement

- Kant disagreed with both the Rationalists and the Empiricists.
- Reason, with all its concepts and frameworks, cannot give knowledge if it has no raw data to work with.

“Concepts without intuitions are empty.”

- Empiricists, with all its raw data, cannot give knowledge if it has no concepts or frameworks with which it can make sense of the raw data the senses give us.

“Intuitions without concepts are blind.”



Concepts & Intuitions



Kant's Copernican Turn

- Kant: we should use all means in order to resolve the problems of Epistemology that R & E tried to address and failed.
- Like Copernicus, he was turning things on their heads in an attempt to see if that would make things work out a lot better
- Copernicus: the geocentric model of the solar system results in weird planetary movements
- Copernican turn: assume the opposite!
- Kant: Is there anything common between the Rationalists and the Empiricist?
- Both saw the mind as a **Passive** Recipient/Observer of Phenomena
- i.e. the mind conforms to the objects, rather than the other way round
- Kant's Copernican Turn: postulate the Mind as an **Active Constituter** instead, i.e. that objects conformed to how the mind represented them

Kant's IBE

- In essence, Kant's argument works like an IBE (Inference to Best Explanation)
- He postulated:
 - a **hypothesis** (Mind as Active Constituter rather than Passive Receiver)
 - to see if it **best explains** how we are able to usually **trust** our experiences (e.g. that we don't doubt that there is a table in front of us)
 - and thus **resolve the problems** faced by
 - the Rationalists (moving beyond analytic and mathematical statements)
 - and the Empiricists (recovery of Newtonian Science)



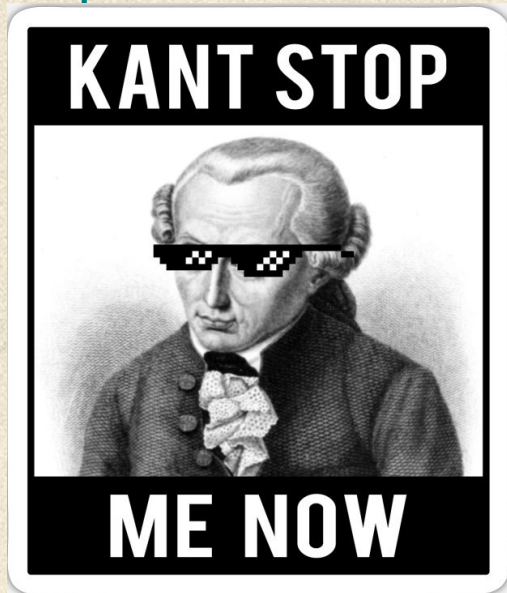
Up to now it has been assumed that all our cognition must conform to the objects; but all attempts to find out something about things a priori through concepts that would extend our cognition have, on this presupposition, come to nothing. Hence **let us once try** whether we do not get farther with the problems of metaphysics by **assuming** that the objects must conform to our cognition which would agree better with the requested possibility of an a priori cognition of them, which is to establish something about objects before they are given to us.



—Kant, emphasis added
Critique of Pure Reason (B xvi)

What it all means...

- Kant: there is always a **gap** between the world as we experience it (phenomenal) and the world as it really is (noumenal)
- Essentially, we are born with a particular kind of 'shades' which causes this gap
- These 'shades' are the **filters of our consciousness**.
- Our consciousness **processes** the raw experience (the world as it is)...
- so that our **final perception** of the world is not the world as it is but the world as it appears to us
- In this way, the Mind is not a passive observer of phenomena but an **active constituter** of phenomena



Sensibilities & Understanding

- 2 kinds of filters of consciousness: the Forms of Sensibilities and the Forms of Understanding
- Forms of **Sensibilities**: allow the mind to receive (or rather, 'grab') data from the (unknowable) Noumenal World (the World-in-Itself).
- They provide the mind with raw data/ content.
- These Forms are Time and Space
- Forms of **Understanding**: allow the mind to make sense of the content it receives from the Noumenal World.
- They are the concepts the mind applies to the raw data
- Causality is one of these concepts (among many others).
- Hence, objects in the Phenomenal World always appears to us to be in causal relations with each other and exist in time and space.



Transcendental Move by Consciousness to Constitute Phenomena from Noumena

<u>Consciousness</u>	<u>The World as it appears (Phenomena)</u>	<u>The World as it is (Noumena)</u>
<p>Form of understanding: - Causality (among others)</p> <p>Forms of sensibility: - Space - Time</p> <p>These are the forms of our experiences. This is why all our experiences are either temporal or spatial.</p>	<p>Newtonian World</p> <p>- Kant speculates that the Newtonian world is the world that we know and experience</p>	<p>X</p> <p>Thus, the world as it is is neither spatial nor temporal nor causal.</p>



Analogy

- Imagine you are packing your room, getting ready to move to a new house.
- You have a box and you wish to put your things in it.
- One way is to simply dump all your things into the box without any regard to classifying and recording what goes in there.
- Problem: You forgot what went in there and when you open the box and look at it, it just looks like a mess.
- In order words, **you cannot make any sense of it.**



A Lesson Learnt

- However, imagine that you have now learnt your lesson.
- So you start to rearrange the things in the box such that it becomes a lot neater.
- For example, the big and hard things go in first, while the small and soft things go in last.
- You might also use smaller boxes to be placed into the bigger box.
- This way, **you know where your things are.**

The Analogy Explained

- The mind is like a box.
 - The Forms of Sensibilities go out and retrieve data from the Noumenal World and puts the data into the box that is the mind.
 - Without this data, no matter how sophisticated your concepts are, you will have nothing in the mind.
 - Hence **“concepts without intuitions are empty”**
 - However, if the data is just thrown into the box without any kind of conceptual thinking of how to put what things where, it just is a mess and you cannot make any sense of it.
 - Hence **“intuitions without concepts are just blind”**
 - So the Forms of Understanding are applied onto the data in order to categorise the data, classify it and make sense of it.
 - It is **only then** that Knowledge is reached.
- Note: there is **no chronology** to this process.

Kant's Transcendentalism

- Involves both Reason (FoU) and Experience (FoS)
- Note: the FoC themselves are **a priori**
- Why? Because they form the conditions for the very possibility of experience and are thus **before** experience
- Kant: Without these filters of consciousness, we would not be able to have experience
- This also means that Consciousness, because it constitutes the phenomenal world, is outside of the phenomenal world
- i.e. Consciousness transcends experience and is never knowable by it through reason or experience
- "The eye of the visual field is outside of the visual field." (Wittgenstein)

Human Limitations

- Kant's work was titled "A Critique of Pure Reason"
- His earlier work "Inaugural Dissertation" embraced Platonism and that we could gain knowledge of both the sensible (Phenomenal) and the distinct intelligible (Noumenal) worlds
- But in the Critique, Kant **severely limits** the mind's ability to gain knowledge
- The Kantian filters of consciousness, because they are the preconditions for experience, can never be removed
- Which means that **all knowledge can only ever be of the Phenomenal World**
- The mind can never know what anything of the Noumenal World



03

**Very
good...**

Assessment

- Certain advantages over the Rationalists and Empiricists
- Most importantly, Kant's view allows him to gain **meaningful** knowledge
- i.e. propositions that are certain and that go beyond tautologies (unlike Rationalism)
- In other words, Kant's epistemology allows him to account for synthetic a priori truths
- A Priori – for Kant, knowledge has to be **necessary** and **universal**
- Synthetic – **meaningful** knowledge is only possible when 2 or more concepts/ideas are put together
- Examples: Mathematics (Arithmetic and Geometry), “Every Event has a Cause”

Synthetic A Priori

- Kant: Mistake to think that Math is Analytic A Priori
- Why? Not clear that “4” (predicate) is included in “2” and “2” such that “2+2=4” (subject)
- If it was, then it should be clear to us, very quickly/immediately, what is the sum of “129834543+123987345”
- Kant’s e.g.: “7+5=12” – 12 is not included in 5 and 7.
- The only thing thought here is “their union in a single number without it being at all thought what the particular number is that it unites them”.
- To get 12, what is needed not analysing but putting together.

Two coffees, please.



2 coffees, please.



$$\int_{e^{-1}}^1 \frac{1}{x} dx + \int_{e^{-1}}^1 \frac{d}{dx} \left(\frac{1}{x} \right) dx + e$$

coffees, please.





The concept of twelve is by no means thought by merely thinking of the combination of seven and five; and analyze this possible sum as we may, we shall not discover twelve in the concept. We must *go beyond* these concepts, by calling to our aid some concrete image [Anschauung], i.e., either our five fingers, or five points (as Segner has it in his Arithmetic), and we must add successively the units of the five, given in some concrete image [Anschauung], to the concept of seven.

Hence our concept is really *amplified* by the proposition $7 + 5 = 12$, and we add to the first a second, not thought in it. (Emphasis added)

—Kant



Arithmetic & Geometry as SAP

- Arithmetic is thus based on counting, an operation that **puts together** various numbers, and **not a mere analysis** of a subject
- Geometry e.g.: “A straight line is the shortest distance between 2 points.”
- But...
- Straight – qualitative concept
- Shortest – quantitative concept
- Geometry is the putting together of two non-necessary concepts
- Math is still a priori!
- No experience needed; just mental operations

Against Scepticism

- Kant's Epistemology allows him to rescue (Newtonian) Science from Humean Scepticism
- For Causality is now 'built into' our experience; it is necessary for experience
- This then allows him to gain **more** knowledge than would have been possible without causality

- Further, Kant held that these filters of consciousness are **universal**, i.e. to be found in everyone
- Otherwise, we would be representing/constituting objects in different kinds of space and walking into each other all the time

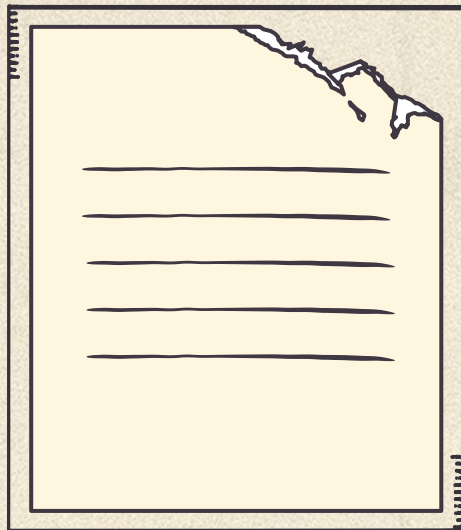
- It is these elements of **universality** and **necessity** that allow Kant to introduce **certainty** into his epistemology

Intuitive Appeal

- Kant's system seems to be rather intuitive
- His system combines both the strengths of the **Rationalist** (certainty) and **Empiricist** (breadth of knowledge)
- In line with common sense: that we need both in order to account for our knowledge
- The filters of consciousness (while revolutionary for Kant's time) does seem to fit in with how we view our sense experience
- i.e. that our minds do **structure and influence** our sense data
- Modern psychology seems to support the idea of certain "innate categories according to which we apprehend the world" like colour, space, time and numbers:
- A baby is born with **innate mechanisms** for individuating objects and for extracting the numerosity of small sets
- In children, numerical estimation, comparison, counting, simple addition and subtraction all emerge **spontaneously** without much explicit instruction

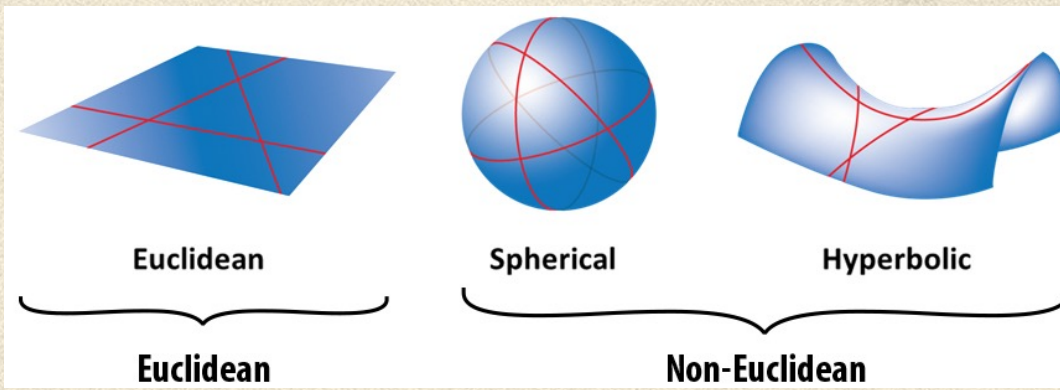
But not
perfect

04



Non-Euclidean Geometry

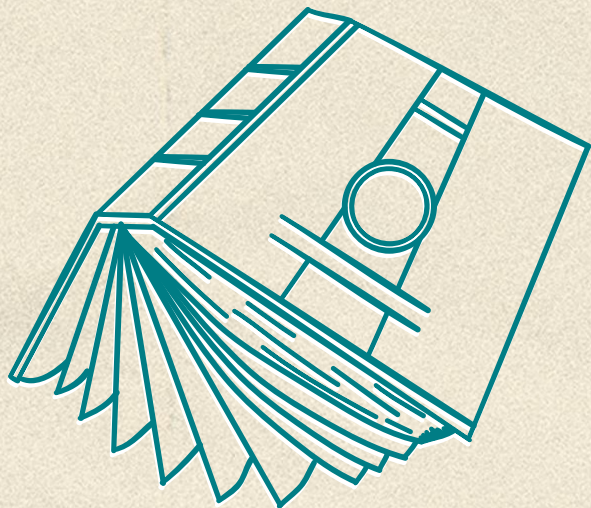
- Recall: Kant sought to rescue Newtonian Science from Humean Scepticism
- Newtonian Science takes place on Euclidean planes
- For centuries, many have assumed that the *only* possible geometry is Euclidean geometry
- However, non-Euclidean geometry based on axioms that are different from Euclid (e.g. that two parallel lines will meet) is possible!
- Worse, Einsteinian Relativity demonstrated that empirical space is non-Euclidean
- Is this a fatal blow for Kant's system? Or does it really matter?



Not Conclusive

- Kant argued using a series of Transcendental arguments
P1: we have experiences
P2: If we have experiences, then we must have the conditions necessary for experiences.
C: we must have the conditions necessary for experiences (P1, P2)
- But while this might be the best explanation we have so far, it still might not be the truth (recall IBE)
- Barry Stroud: “Transcendental arguments fail to show anything about how the world really is. All they can show is how we must think or what we must believe and any conclusions about this cannot be used to infer anything about reality. All Transcendental Arguments can show are **psychological necessities, not metaphysical ones.**”





Recap

Failure of Foundationalism

Rationalism and Empiricism both failed in giving us sufficient knowledge that is certain

Kant's System

An IBE, a Copernican Turn, that is the Middle Way between Rationalism and Empiricism

Strengths

Accounts for more knowledge that is certain and is intuitive

Weaknesses

Best explanation is not a perfect explanation

Thanks

Do you have any questions?
Follow the project updates
addyouremail@freepik.com
+91 620 421 838 yourcompany.com



CREDITS:

This presentation template was created by
Slidesgo, including icons by Flaticon, infographics
& images by Freepik

Please, keep this slide for the attribution

