

# EPISTEMOLOGY

## Practical Session Plan No. 11

Subject–object relations, truth, scientific cognition, and the epistemological challenges of the digital age

Philosophy · Seminar presentation

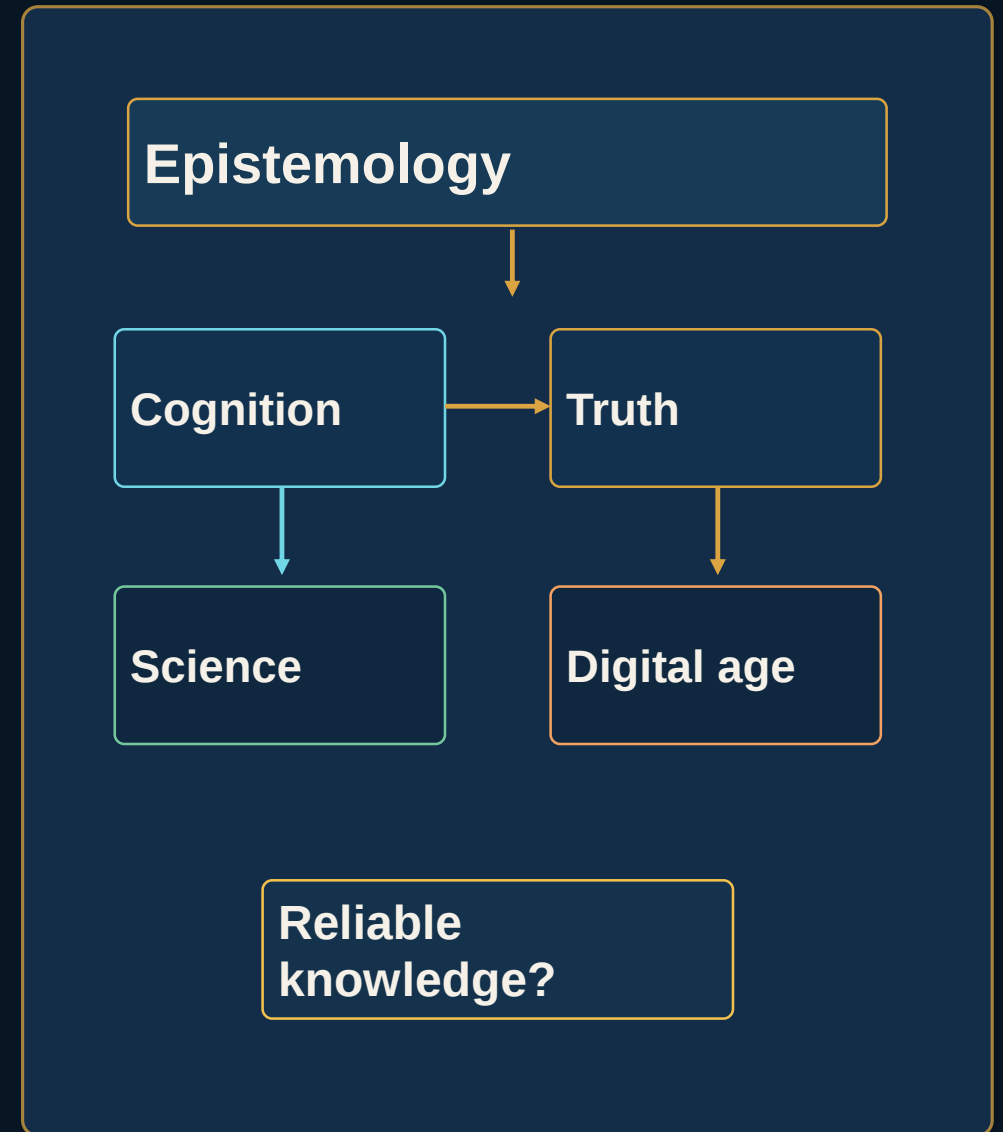


# Session Plan

OVERVIEW

The practical session is organized into five thematic blocks and a final exercise:

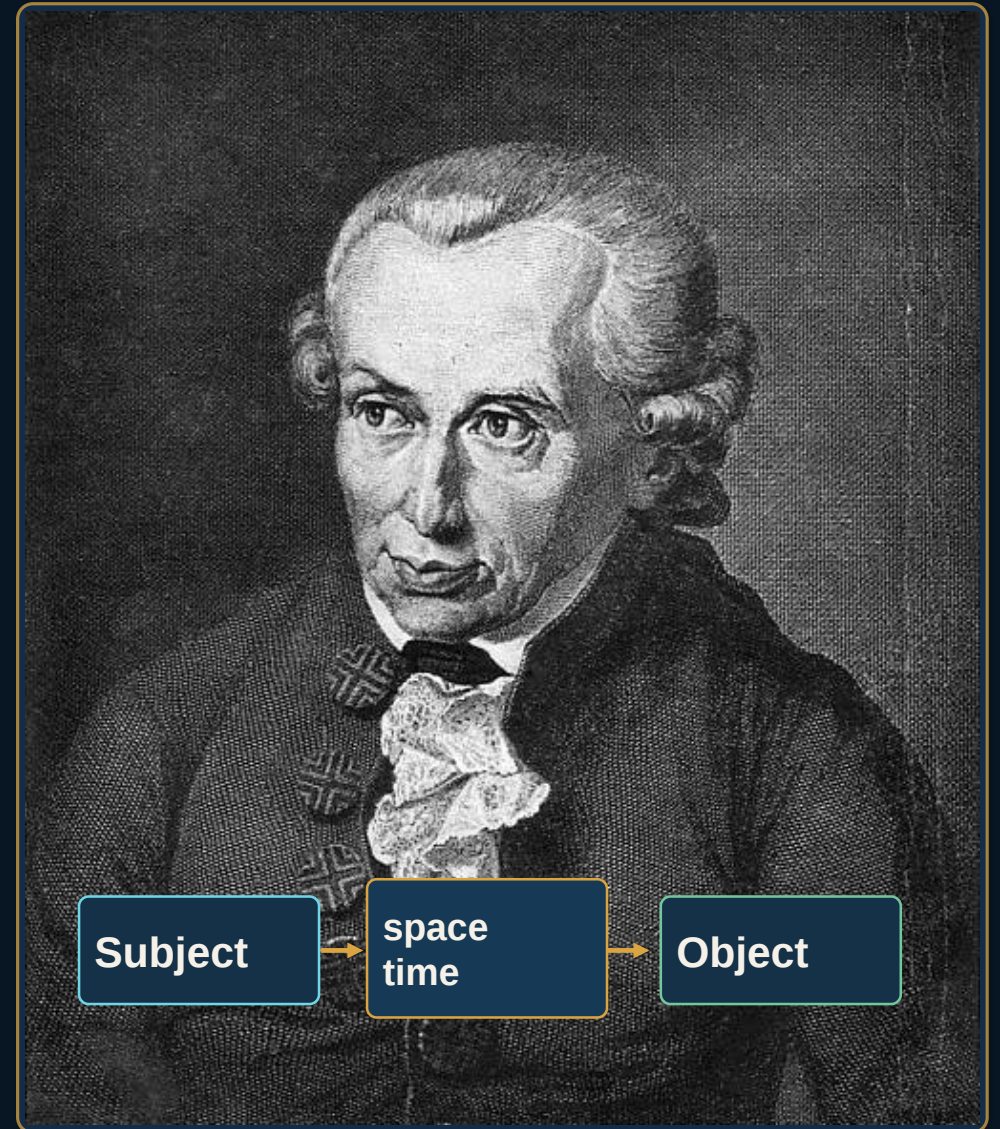
- 01 The categorical foundation of epistemology
- 02 Levels and forms of cognitive activity
- 03 Sources of knowledge: empiricism vs. rationalism
- 04 The problem of truth and its criteria
- 05 Scientific cognition and digital age challenges
- 06 Exercise: connection of concepts



# Foundations of Epistemology

BLOCK 1

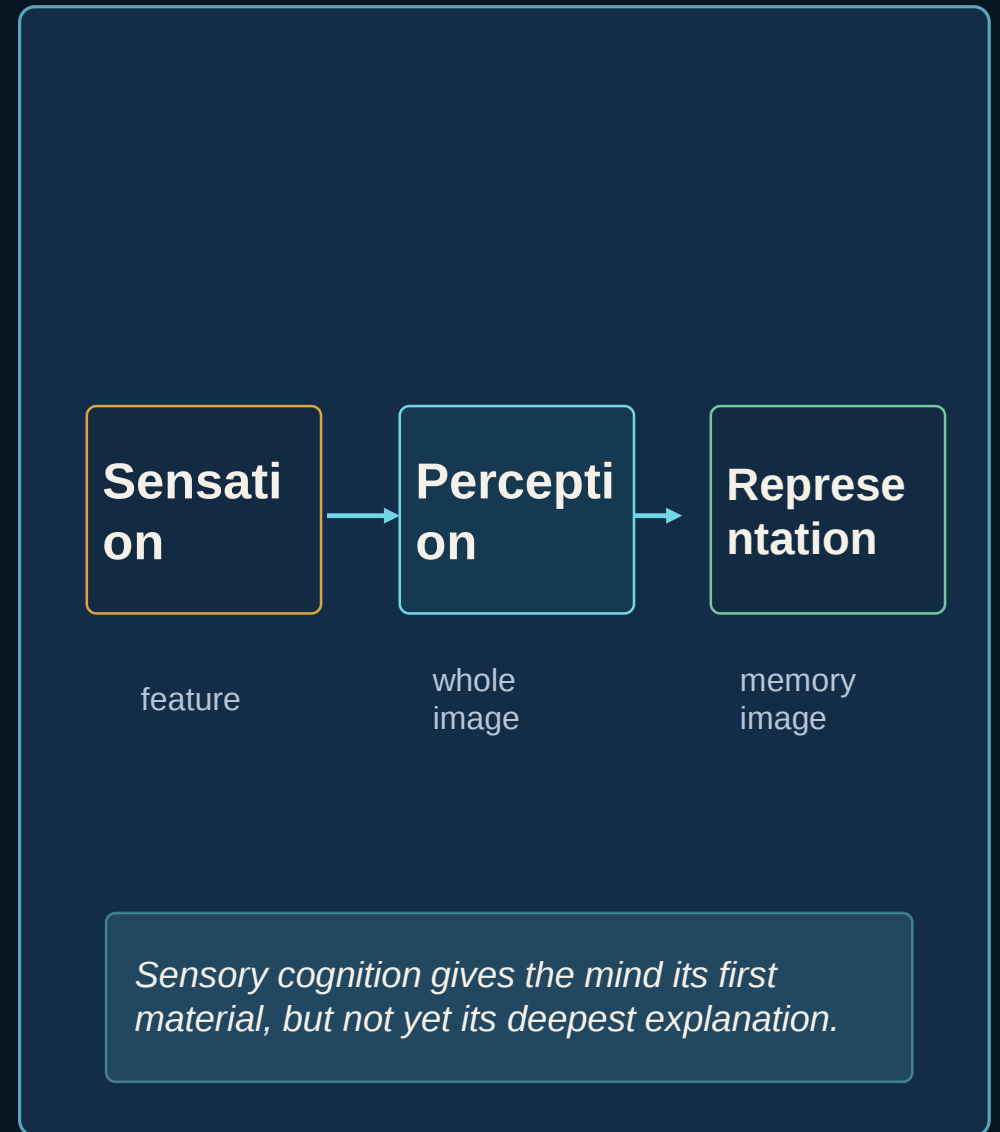
- Cognition begins with a relation between subject (the knower) and object (that which is known).
- Knowledge is not a simple “mirror reflection” of reality, because consciousness always interprets, selects, and organizes experience.
- Classical positions on knowability differ: optimism trusts reason, skepticism tests claims through doubt, and agnosticism stresses the limits of access.
- For Kant, we know phenomena rather than the thing-in-itself: reality reaches us through the forms of space, time, and understanding.



# Sensory Cognition: From Contact to Memory

BLOCK 2

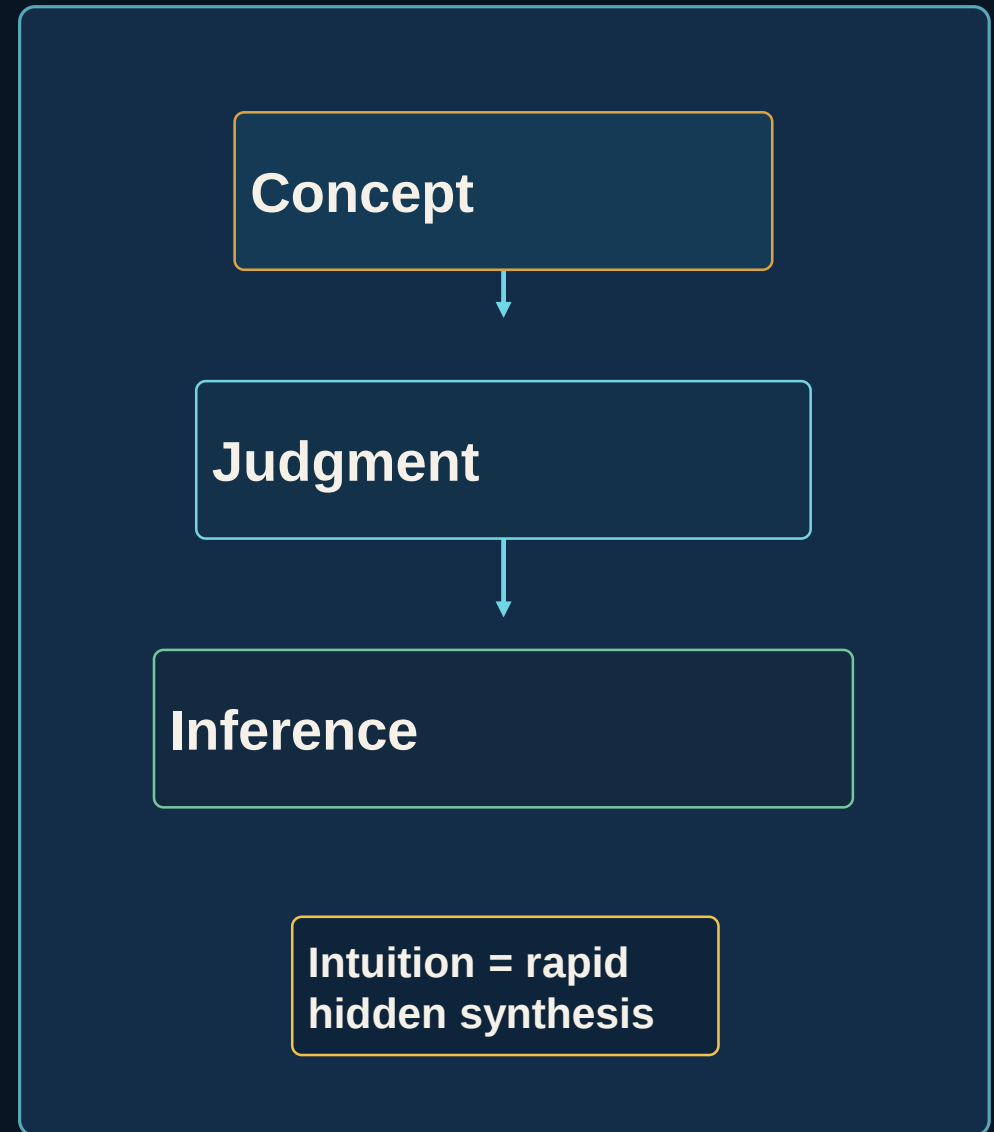
- Sensory cognition is the immediate level of contact with the world through the senses.
- Sensation records separate features such as color, sound, taste, or touch.
- Perception unites these separate impressions into a holistic image of an object.
- Representation keeps the image in memory even when the object is absent, opening the path to imagination and recollection.



# Rational Cognition and Intuition

BLOCK 2

- Rational cognition moves from images to concepts, judgments, and inferences.
- It abstracts from accidental details and makes it possible to discover laws, causes, and essential relations.
- Concept names the essential; judgment affirms or denies; inference derives new knowledge from what is already known.
- Intuition is often described as extra-rational, but it can also be understood as the rapid, hidden synthesis of prior experience.



# Empiricism vs. Rationalism

BLOCK 3

Two classical answers to the question “Where does knowledge come from?”

## EMPIRICISM



- Experience is the primary source of knowledge
- Mind begins as tabula rasa
- Observation, induction, and experiment are decisive

## RATIONALISM



- Reason provides certainty
- Innate ideas or necessary structures matter
- Deduction reveals what senses alone cannot secure

Modern science usually treats the conflict as complementary:

experience supplies data, while reason organizes and tests it.

*Bacon: “Knowledge is power.”*

# Kant's "Copernican Revolution"

BLOCK 3

- Kant argued that cognition is possible only through the cooperation of sensibility and understanding.
- The senses provide the raw material of experience, but the mind structures it through space, time, and categories.
- We therefore do not simply copy the world; we construct experience by synthesizing what is given with the forms of thought.



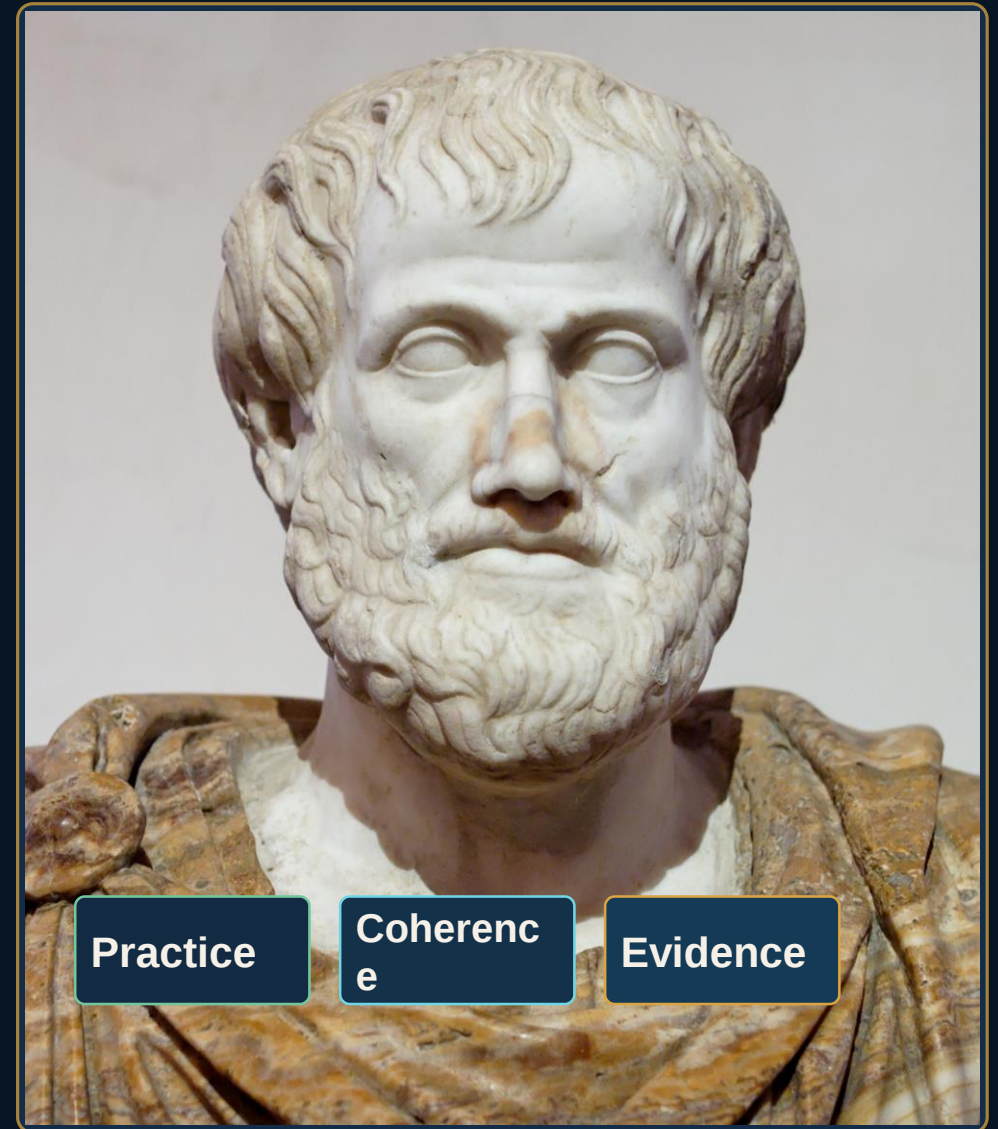
**Phenomenal world  
(objects as they appear  
in experience)**

Neither pure sensation nor pure reason is sufficient alone.

# Truth and Its Criteria

BLOCK 4

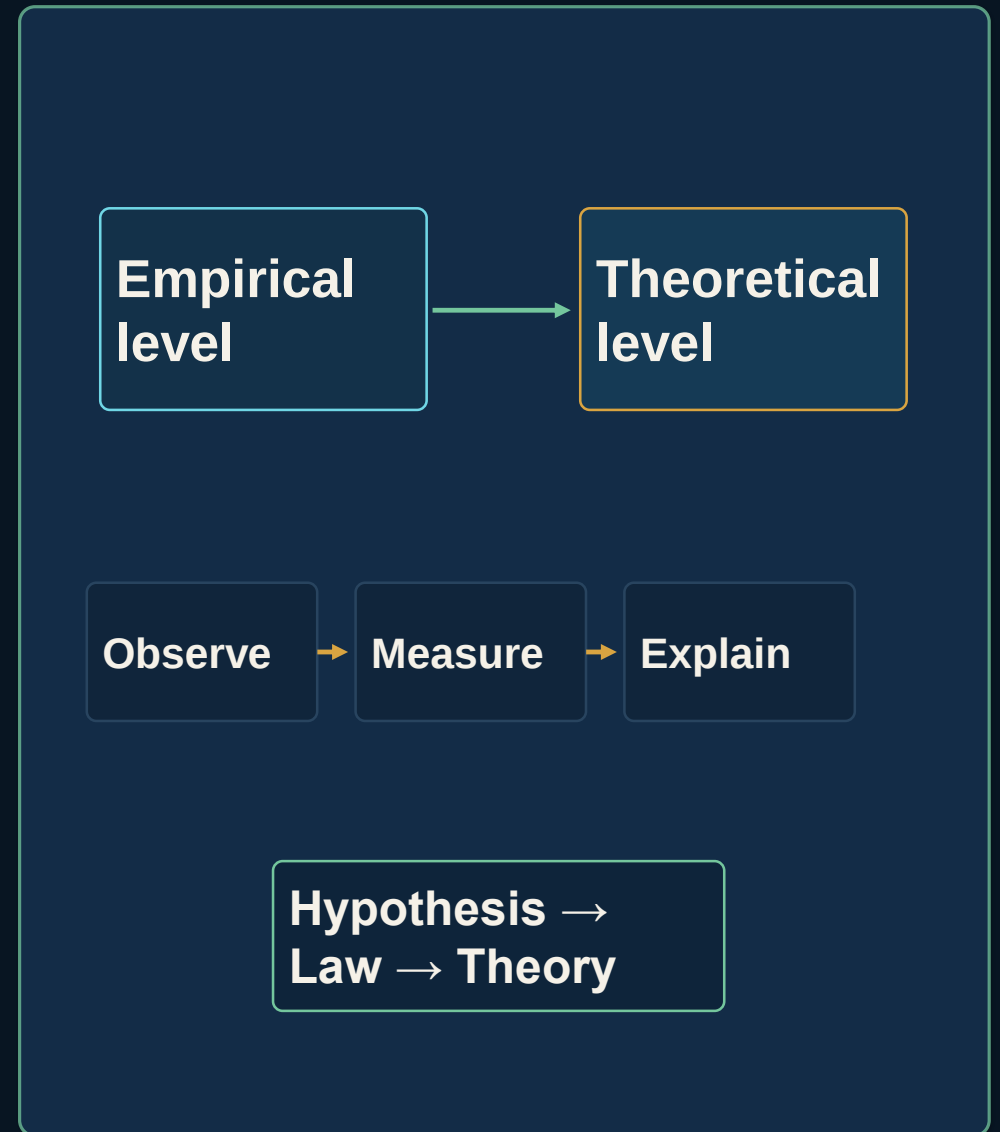
- Truth is commonly understood as the correspondence between knowledge and reality.
- Every truth is both relative and concrete: it is valid within certain conditions, while absolute truth remains an ideal horizon.
- Main criteria include practice, logical consistency, coherence with established knowledge, evidence, and expert validation.
- Different approaches emphasize different aspects: correspondence, coherence, pragmatic, and existential interpretations of truth.



# Scientific Knowledge: Levels and Methods

BLOCK 5

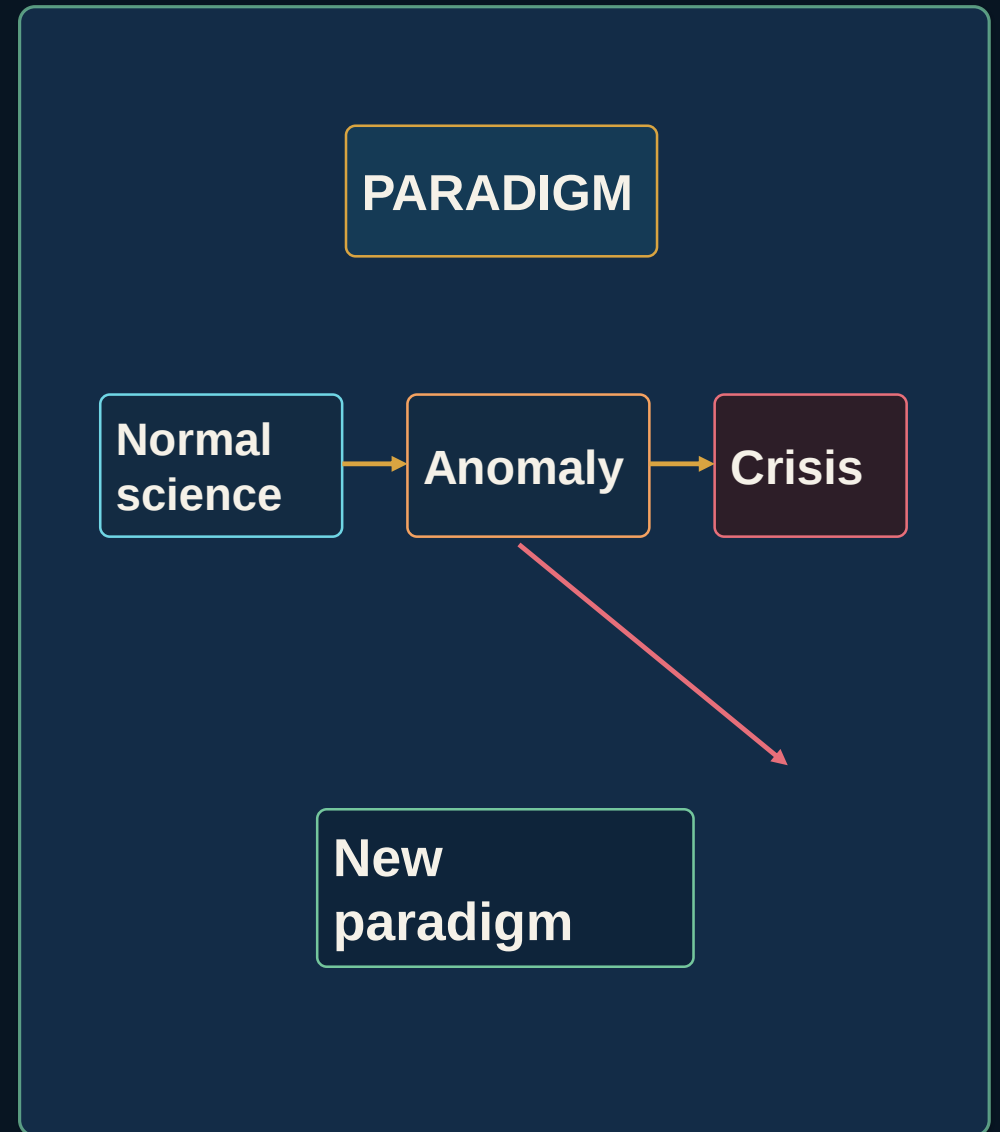
- Scientific knowledge is evidence-based, systematic, critical, and open to revision.
- Its empirical level includes observation, measurement, and experiment.
- Its theoretical level includes hypothesis, law, theory, modeling, idealization, and thought experiment.
- Science does not merely collect facts; it transforms them into explanatory structures.



# Kuhn: Paradigms and Scientific Revolutions

BLOCK 5

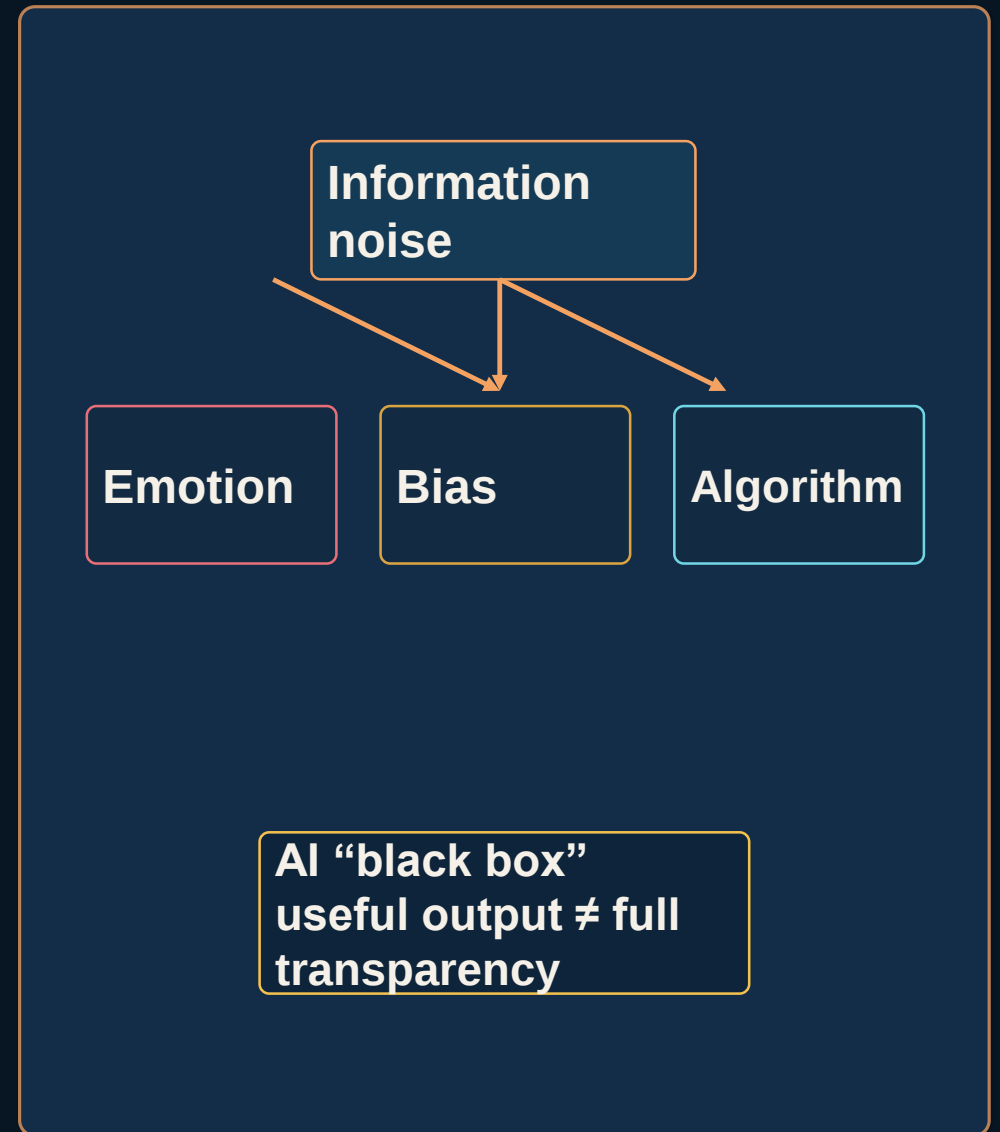
- Thomas Kuhn described science as a sequence of paradigms rather than a smooth accumulation of facts.
- A paradigm gives scientists accepted methods, standards, and exemplary solutions.
- When anomalies become too strong, the old framework enters crisis and a scientific revolution becomes possible.
- Paradigm shifts change not only answers, but also the very way the scientific world is seen.



# Epistemology in the Digital Age

BLOCK 5

- Today the problem is often not a lack of information, but an excess of it.
- Post-truth shifts attention from objective facts to emotions, identity, and persuasive narratives.
- Cognitive biases and algorithmic filter bubbles reinforce selective exposure and weaken critical distance.
- AI introduces the “black box” problem: a system may generate useful results even when its internal logic is not transparent.



# Seminar Exercise: Connection of Concepts

PRACTICE

Task: explain in 2–3 sentences how one concept complements, develops, or negates the other in epistemology.

1. Tabula rasa — Cognitive biases
2. Agnosticism — Microworld
3. Practice — Black box AI
4. Rationalism — Fake news
5. Paradigm — Conventionalism

## Suggested answer pattern

1. State the logical relation.
2. Explain the philosophical tension or complementarity.
3. Link the pair to modern epistemology.

*Example: “Practice” and “Black box AI” raise the question whether successful results are enough for truth when inner reasoning remains opaque.*