

Inductive Reasoning

- Inductive reasoning is a type of logical reasoning where general conclusions are drawn from specific observations or evidence.
 - Specific observation: Swans are white in color
 - Pattern recognition: All swans at our zoo are white
 - General conclusion: All swans are white.
- In this example, the conclusion is drawn based on the observation of multiple white swans. However, it's important to note that this conclusion is not guaranteed to be true, as there could be black swans that have not been observed. This is why inductive reasoning is often associated with probability rather than certainty.

Deductive Reasoning

- Reasoning that begins with general principles or theories and tests them by applying them to specific cases.
 - Existing theory
 - Formulate hypothesis
 - Collect data
 - Analyse data
 - Accept/reject hypothesis
- Example: Starting with the theory that all humans are mortal and then concluding that because Socrates is human, Socrates must be mortal.

Objectivism

- Reality exists independently of consciousness. Things are what they are, regardless of what anyone believes or feels about them.
- Objectivity is the practice of being neutral, impartial, and not influenced by personal feelings or biases in research or analysis.
- In a study about crime rates, researchers avoid letting their opinions about criminals influence their interpretation of data. They focus purely on statistical evidence.
- Objectivity is essential for accurate decision making, fair and just treatment, reliable information, trust and credibility, and effective communication.

Subjectivism

- Reality is shaped or determined by our perceptions, beliefs, or feelings.
- Subjectivity is a perspective shaped by personal feelings, beliefs, or experiences, which can influence one's interpretation of facts.
- Example: A researcher studying social inequality might allow their personal experiences of growing up in poverty to influence their interpretation of the data.
- While objectivity is important for certain purposes, subjectivity is equally valuable in understanding the complexities of human experience and fostering empathy, creativity, and cultural diversity.

Empiricism

- John Locke, David Hume and George Berkeley.
- The belief that knowledge comes primarily from sensory experience and observation. One may use smell, touch, hearing, seeing and taste to know the outer world. For example: A scientist conducting an experiment to gather data about climate change relies on measurable, observable evidence, not just theory.
- There is no such thing as innate knowledge. At birth, human beings are like blank slate. Our experience and learning allow us to gain knowledge about the outer world.
- Experience and memory helps one to have a moral code.
- Experimental proofs tell us about external reality.
- Empiricism mainly relies on inductive reasoning

Rationalism

- Plato, Aristotle, René Descartes and Baruch Spinoza.
- The belief that reason and logical thinking are the primary sources of knowledge, independent of sensory experience. For example: Mathematicians rely on logical proof and reasoning to establish theorems, rather than empirical evidence.
- Knowledge is independent of sensory experience.
- Human beings are born with innate knowledge. This knowledge assists in forming beliefs and morality
- Experience without logical thinking and reasoning do not to knowledge

Positivism

Core Idea: Positivism, founded by Auguste Comte, emphasizes that the only valid knowledge is that which is based on empirical observation and scientific methods. It insists that all knowledge should be derived from observable, measurable phenomena and that facts should be verified through sensory experience.

Relation to Empiricism: Positivism is deeply rooted in empiricism, as both assert that knowledge should be grounded in observation and experience. Positivists believe that through systematic observation, we can discover objective truths about society, akin to the natural sciences.

Relation to Rationalism: Positivism has a more cautious relationship with rationalism. While it values logical reasoning, positivism downplays the rationalist belief that pure reason, without empirical observation, can yield reliable knowledge. In positivism, reason is secondary to sensory

Post-positivism

- Post-positivism emerged as a response to the limitations of **positivism**. It maintains that while the scientific method is valuable for understanding the world, our observations and theories are inherently fallible. Post-positivists believe that all knowledge is **provisional** and subject to revision, emphasizing the importance of critical reflection and recognizing the limits of human understanding.
- While **empiricism** claims that sensory experience is the basis of all knowledge, post-positivists argue that observations are always theory-laden and influenced by human bias. Therefore, empirical data must be **critically evaluated** and should not be seen as providing absolute certainty.
- Post-positivists reject the **absolute certainty** that traditional rationalism often seeks, advocating instead for **falsifiability** and the continuous refinement of theories through reasoned critique.

POST Modern Theory

Postmodern theory is a framework in sociology and other disciplines that challenges the ideas and assumptions of modernity, particularly the belief in objective truth, universal narratives, and the possibility of a single, coherent understanding of the world. Instead, postmodern theory emphasizes the fragmented, subjective, and socially constructed nature of reality.

Key features of postmodern theory include:

1. **Rejection of Grand Narratives:** Postmodernists argue against the idea of overarching explanations or "grand narratives" that claim to explain all aspects of society or history, such as Marxism or Enlightenment rationality. Instead, they focus on local, specific, and context-dependent knowledge.
2. **Relativism:** Postmodern theory embraces the idea that knowledge and truth are relative to particular cultures, contexts, and perspectives. It challenges the notion of an objective reality that can be universally understood or agreed upon.

3. **Focus on Language and Discourse:** Postmodernists emphasize the role of language, symbols, and discourse in constructing social realities. They argue that our understanding of the world is shaped by the way we talk about it, and that meanings are not fixed but are constantly shifting.
4. **Deconstruction:** A key method in postmodern theory, deconstruction involves analyzing and breaking down texts, ideas, and social practices to reveal hidden assumptions, contradictions, and power dynamics. This approach often seeks to expose the instability of meaning and the ways in which dominant ideologies are maintained.
5. **Pluralism and Diversity:** Postmodern theory values diversity of perspectives and experiences, rejecting the idea of a single "correct" way to understand or organize society. It highlights the multiplicity of voices, especially those that have been marginalized or silenced in mainstream discourse.
6. **Critique of Power and Authority:** Postmodernists are skeptical of traditional sources of authority and power, questioning the legitimacy of established institutions, ideologies, and norms. They often explore how power operates through language, knowledge, and social practices to shape and control societies.

All in all, postmodern theory is anti-objectivism, anti-binary thinking, anti-essentialism, anti-determinism, anti-reductionist and nihilistic. It challenges traditional views of reality, knowledge, and power, emphasizing the subjective, constructed, and fragmented nature of social life. It encourages a more critical and pluralistic approach to understanding the complexities of the modern world.