

Topic 1: 'READING AND INTERVENING' by Ian Hawkins.

Introductoryⁱ The Philosophy of Natural Science

1. CONCEPTS OF REALITY?

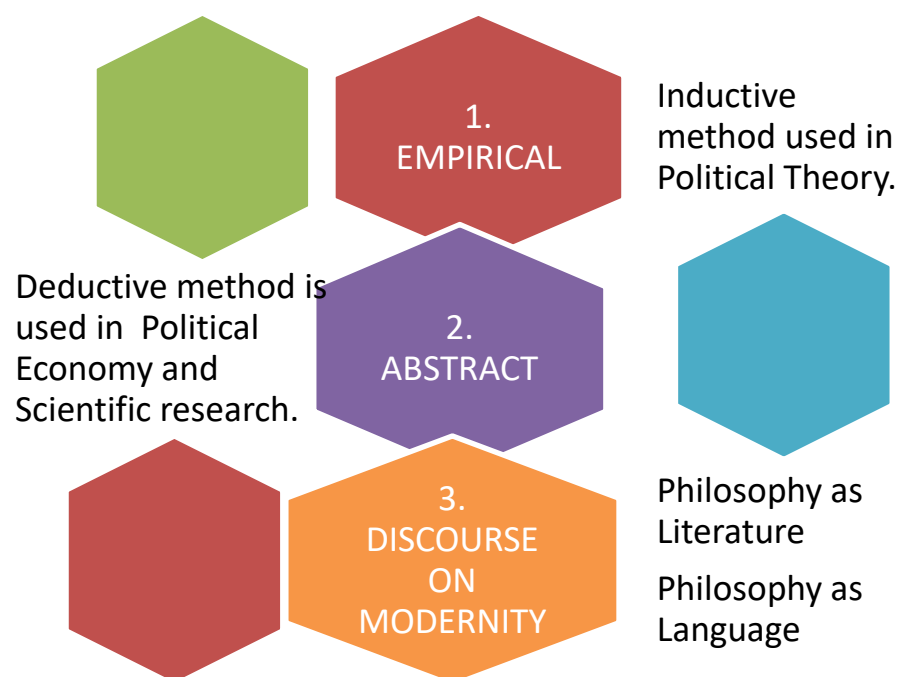
1.1 What?

1.2 How?

1.3 Why?

1.4 Understand various views.

4. Reality comprises of Ideas that may be abstract or empirical
(those that can be tested and applied)



- 1.1 'Indian Political Thoughts' are NOT the thoughts of one person as is the case in western political thoughts. These are ideas and methodologies integrating the Mind and the Body, Religion and Society.

2 **REALISM** comprises of Empiricism and Rationalism.

2.1 **Empiricism**: is used in Inductive thinking process. It has 'Causation' as a part of its debate. Political Theory is the main outcome of this debate.

2.2 Empirical area is that level of reality that is a phenomenon, as in natural science. It HAPPENS. It EXISTS. It is in the realm of BEING. A thinker has only to see it, find it and understand what is already in existence. What the explorers did from 1500 AD onwards, the philosophers of social sciences do or have to do in the realm of society and polity.

2.3 Therefore, empiricism relates to: Positivism and the Methodical Individualism.

2.4 'Paradigm Shifts' occur in Ideas through empirical based research. The trend of paradigm shifts is visible in various political institutions and structures through historical times. The latest such shift has starts from 1990s due to the new Information and Communication Technology.

3 Two ways to understand Politics as a discipline:

3.1 **Deductive Thinking Method**: used by Aristotle in 6th BC in Truth, Reality and Politics. Truth is not given directly. Humans have to make sense of Truth by adopting various methods to reach it. 'What is Truth and How to make sense of Truth'.

3.2 **Inductive Thinking Method**: The existing reality of understanding of truth is questioned. Television is a phantom that plots of images on a screen. An entire world is created on a screen, through cinematic technology. It resembles the real world, but can it be said to be true or real?

The 'State of Being' as per Deductive Thinking:

5. The Method :

Deductive Thinking method starts with formulation of one statement called ‘a priori’. The ‘a priori’ is presumed to be correct and true. The ‘a priori’ is and it exists. It is not required to be proven to be true. It does not depend on any other external thing for validation of the ‘State of its Being’.

Examples of ‘a priori’ statements are

- a) natural numbers are from 0 to 9.
- b) 1 plus 1 is equal to 2.
- c) ‘the universe known to humans, has been created by a power that is superior to the power of humans.’
- d) ‘God exists’.
- e) ‘No person is guilty unless proved to be so.’
- f) Theorems in Geometry are solved on basis of ‘a priori’ statements.

5.1 Using ‘a priori’ to establish the ‘state of being’:

4.1.1. The ‘a priori statement’ is placed in the context of Reality. Mathematically, all space is believed to exist within the four Quadrants, of the Number Line. The Number Line starts from zero and continues to infinity in both directions, horizontally and vertically.

4.1.2. The first two quadrants are of positive numbers, within which all Reality exists. The 3rd and 4th quadrants are of negative numbers, including irrational numbers within which illusions and the dream world is located. The a priori statement can be placed at any point in any of the four quadrants.

4.1.3. From the given point, the argument is taken forward to prove or disprove the ‘a priori’ statement. However, as only the first two quadrants are of positive numbers the a priori placed there can provide positive arguments and conclusions. From the negative quadrants, only negative results, for disproving the a priori statement can be obtained.

6. Important Thinkers who have used the Deductive Method:

- 5.1 Pascal's theory of probability is based on 'suppose' and 'reason'. Probability is applied to argue for existence of 'Religion'. Deductive method postulates that there is a God. It exists. This is the 'a priori' starting point.
- 5.2 Karl Marx states that 'knowing' and 'being' are the two stages of the same human being. He illustrates this by arguing that 'Capital' and 'Labour' are one and the same, but the market divides this one reality of being into two forms.
- 5.3 On State of Being, Descartes's argument in 'Discourse of Meditation' is that "I am because I think" that I am. Being for him is thinking and believing. Understanding is an abstraction of one's being or existing. This is a level higher than the physical being.
- 5.4 Karl Popper presumes about the unknown through conjectures, to confirm or not confirm a truth. He calls his method 'conjecture and refutation' and it is a scientific method. Physics leads to physical truth from where the 'known' emerges. Meta physics leads to conjecture level. Conjecture allows the assumed to remain as a conjecture only, without trying to prove it. Popper raises the questions : what is science? How does it work? What is an error?
- 5.5 Conjecture leads to thinking and that leads to reason. But the mathematical structures such as $2 + 2 = 4 + 4 = 8$ cannot be seen or tested by some relationship to reason and abstract. Logic is one thing given by reason. Logic is applied in Mathematics.
- 5.6 Plato, in his 'Republic' uses 'Methodical Dialectics' that involves a dialogue between Socrates and Plato. The book begins with the question, "What is Justice?" This is the 'a priori conjecture' selected as the starting point by Plato. He then uses the 'Realm of Ideas' to

deduce 'the state of politic'. This is similar to the 'state of being' referred above.

A Deduction means 'Keeping one's place without disturbing others'. The wisdom of Socrates states one view, namely, Justice is nothing but the interest of the strong.' Socrates defines Philosophy to be the 'Love for wisdom'. A functional definition of justice is then reached, namely that what is plotted by the mind is the reality of politics and justice. To be just, the Republic has to see that all are kept safe.

- 5.7 The Deductive Method has proved to be a very effective method. Many scientific discoveries have resulted through the use of this method. For example, discovery of Oxygen in 1833, by Phlogiston.

7. INDUCTIVE THINKING METHOD

7.1 The method has probability as its basis. It involves construction of a shape or framework or a face of Truth, brick by brick or idea by idea. Small details are observed and added up to 'generalize a concept'.

7.2 First, the perceptive reality is envisaged or imagined.

7.3 Next, attempt is made to experience the perceptive reality as a fact, through sensory based perception. This establishes the reality of a thing.

7.4 Perceptive realm of knowledge is also probabilistic because it is not certain. For example $2 + 2 = 4$ is more stable and fixed due to the element of probability. A person's understanding of a tree depends upon the perception of the person.

8. Aristotle thinks more about concrete reality of fragility and impermanency. 'How justice is practiced in the realm of real life?' is the perceptive knowledge of justice. Martha Nussbaum in 'Fragility of Goodness' uses the inductive method. Ethics argues about the fragile

realm of knowledge itself. Good or Bad forms of Government are idealized along with their perversions.

9. In sum, Inductive thinking method is a valid way to gain a better understanding of the world. Empirical knowledge is used to make finer distinctions, while Inductive knowledge is used to categories and classify.

TRUTH AND GOOD

10. The relation between Truth and Good is that the place of good is within Truth. Its place is not with falsehood or corruption. Truth about democracy is in the common good of the largest number. As per Aristotle, Polity is a structure purposely given to a common good. A citizen knows how to live in a polity. Outside the polity there is either God or Beast

10.1 After the democracy of the Greek city states, the Roman Empire that emerged, did not give space to dialectical discourse or understanding of the common good. The Empire had a causal relationship with its people. For this reason, Truth, Goodness, and Freedom, that were ‘ a priori’ , began to weaken under the Empire.

10.2 In deductive method :

- a) The first principle’s construction is with relationship of the a priori with Truth.
- b) World is rational and ordered. Reason exists in being able to see the beauty of the order in the world.

10.3 Deductive and Inductive methods combine to understand the beautiful and the good in the world. Rationality of existence is in the fragility of life. From the understanding of the world, it is seen that a rational order in informing the lives of humans.

10.4

Three
phases of
history of
thought
and
philosophy

1. **Ancient** :The Universe is based on rational order. The human polity should also to be like the human body.

2. **Medieval** : Law of the Lord for 400 years after the Roman Empire. The Roman Catholic Church controlled all thoughts through books.

3. **Modern**: Law of Nature based on Deductive and scientific thinking.

Bibliography

- a) Hollis, Martin. 2000. 'The Philosophy of Social Sciences, An Introduction' Cambridge University Press.
- b) Bernstein, Richard. 1974. 'The Restructuring of Social Sciences and Political Theory'. University of Pennsylvania
- c) Hacking, Ian. 1983. 'Representing and Intervening'. Cambridge University Press.

Coverage:

- 1. Topic 1 Introduction to Deductive and Inductive Thinking (Ancient period) in this pdf .
- 2. Topic 2 Modern period thinking and the notion of 'newness' In pdf part 2.

NOTE: In every term paper assignment and research paper, always include the reference of the source of the material. This is called 'intellectual honesty' and needs to be made an essential part of writing technique adopted in higher studies

ⁱ Based on 6 lectures on Philosophy for Social Sciences by Dr. Savita Singh. Modified and simplified for introductory learning self- study material. Delivered in JNU, New Delhi, Centre of Law and Governance, for students of M.Phil 1st Semester, in September 2006.