Rationality and Reality

Rationality, Reality and Ressociation:

1. **Ressociation** is when reason relates to reason. How Nature operates? Force of Gravity cannot be seen and yet it exists. One needs to understand it critically to get to know its Reality. Mass plus weight is equal to gravity.

2. When Galileo first tried to explain the new Reality of Earth’s relationship with Sun no one believed or understood. Earth is also governed by Reality. For Science, the world is not a gift of God to Man. All heavenly bodies including Earth are governed by the Laws of Nature.

3. **Reality exists in spite of humans.** The Laws of Nature are a definitive necessity and a Reality. This is Scientific Realism. Ethical and Moral matters are not in the realm of Science. Real difference is between Nature and Man. Man has his personal morals and ethics of behavior that varies widely. Man has brought forth his Objective capacity to separate this personal moral and ethical from the external realism of polity of science.

4. **Other characteristics of Reality** are that:
   a) Reality exists outside the known realm without humans knowing about it.
   b) Reality exists by its absence also, and not just by its presence.
   c) Reality operates in an invisible manner. Human are in the initial stages of exploring the Universe. As such, many more Laws of Nature are yet to be discovered or known. This also implies that a great part of the unknown exists than Man is yet to become aware of.
d) Reality has structure and not just measurable dimensions. The structure could be in the form of Layers.

5. **Development of Society** is the development of productive forces of humans. Realism in Polity is understood on basis of Scientific Rationality. Rationality in the forms of Positivism and Empiricism is also used for different purposes. Causal Law in the ‘cause and effect’ format is utilized. For example, God is viewed as a clockmaker, creating a rational mechanism of the world. What causes this clock to keep ticking? Therefore, study of the inner mechanism of the world is as much a part of Scientific Realism as is the external parts.

6. **Certitude:** The Scientific Rationality is also used to create laws that are certain and correct, and that generate the same, similar or expected outputs. New laws of Truth are now known through Science. The process of Negation leads to the basis of Rationality. Descartes used the method of negation all ideas. He went to the extent of negating his physical body, and yet he found that his Mind continued to exist.

7. **Causation:** In the Roman Empire, the Rational Thinking of Socrates was replaced by Cause and causation because its binding principle of rationality was disallowed.

7.1 David Hume (Scotland) extrapolates that a problem in understanding may have arisen during the Empire due to the absence of rationality in thinking. The concept of Probability was introduced in causation. This has continues till modern times.

7.2 In the 16th century Renaissance Francis Bacon experimented and showed the use of the Rational Thinking of Socrates and reintroduced ‘criticality’ as a scientific method. “Show me how that causal law is operating”. Therefore, science was what could be demonstrated. Bacon also accepted that Nature’s laws could
have an exception that could be a natural coincidence. There is no causal explanation to all natural laws. Nature in Bacon’s scientific thinking is based on Empiricism.

7.3 According to him it is not possible to generate laws with any certainty or certitude. Laws can only be generated as probabilities. The legitimacy that laws seek cannot be verified. Therefore, it had an element on empiricism.

7.4 This is the difference between the 16th century meaning of Science and the 18th century definition of Science. Scientific laws must not only demonstrate, but also explain and verify the functioning of the law. Validation, and not seeking to change, became the essential requirement. Without verification scientific laws of Nature are no different from manmade laws that are unverifiable.

8. REASON AND LANGUAGE:

8.1 Both express the Truth. Therefore, both are important for Science, but only the Truth reached through the Inductive Method is adopted. Analytical statements are used for synthetic value that cannot be explained in rational terms.

8.2 As a first step, Fact is separated from Value. Fact is verifiable. Value is not verifiable. This is because facts exist and do not change. They are objective. Value changes because it is subjective.

8.3 For imparting any meaning to Truth, it has to be reduced to language. Language. In 1920 the Analytical School came into being. Bertrand Russell, A. J. Iyer and Stiglitz were its main proponents. They placed Language in the central place of Rationality, and scientific thinking. It has continued to be its core spotlight. Russell’s ‘ Unpopular Essays’ and Iyer’s ‘
Language, Truth and Logic’ are the representative books of the Analytical School.

8.4 Post Analytical Critique developed the view that ‘the objective of Science is not to know the ‘true laws’ but to give predictions. Conditions or models alone are needed to predict the course of events. This is utilized in Economy and Finance.

9. MODERN EMPIRISTS :

9.1 After Descartes’s “I am because I think”, Francis Bacon did not accept everything that reason concluded. He emphasized on Experimentation. This created the New Inductive Thinking that first accumulated all the results gathered through the empirical process. Then an attempt was made to see if they all added up to generate a general law. But this did not hold because whenever the process was reversed, the conclusions could not be sustained.

9.2 Science functions in two ways: first is Ressociation, and the second is Perception and the repetitive process of Experimentation. For example, if a thousand swans are white the general law, created is that ‘all adult Swans are white’. But if even one black swan is found, the general law will have to be modified.

9.3 This teaches that rationality also needs to be doubted. When Rationality is opened to doubt. The certainty in the Natural Law gets modified through the use of language into inductivity. Therefore, in place of ‘All adult Swans’ the expression adopted is ‘Most adult Swans are white’. This is Induction based on Probability. Thus, Language holds the key modern Reasoning.
9.4 Inductive thinking and Probability have proven to be a superior method for Science. Experimentation, expresses Human Freedom of Thought.

10. REALM OF EMPIRICISM: begins with Francis Bacon in England, (1490s) and continues with August Comte (French) and Saint Simon. They argued that if experiments can be used to understand Abstract Reality, the Experiment method could also be used to organize Society and Polity.

10.1 In 1920 this became the new thinking in Europe. It involved progressing scientifically towards developing society and polity in to State created structures, on basis of rationality. This School wanted to create a truly scientific society based on reason. Moral principles could be filtered into it as a technical generality. Technical errors, such as one half of population being poor, could be separated and developed into positivism.

10.2 LOGICAL POSITIVISM of the Empiricist School prevailed for 100 years. It was concentrated in Germany, Austria and France. The paradox of rational aspiration amidst complete impoverishment created by the colonization could not be explained by them. Vienna Circle of thinkers, such as Moritz Schleck, Rudolf Carhop, Otto New Roth, was most prominent. Other visitors to the Vienna Circle were Karl Popper, Kurt Google, and Witecanstien.

10.3 DEDUCTIVE LOGIC: School believed that predictable science is more useful than scientific truth. How did these movements affect Social Sciences? The debates in 1960s were that the scientific revolution had changed the notions of Science by changing its explanations and inter disciplinary
interpretations. In ‘Beyond Objectivism and Relativism’ Richard Bernstein has included all the debates on this change. In the article ‘Interpretation the Science of Man’ by Charles Taylor in Vol. 2 of Philosophical Papers, and ‘Sources of Self’ also by Charles Taylor, most aspects of these debates in 1960s have been covered.

11. HERMENEUTICS

11.1 Hermeneutics is the assertion of sovereignty of logic.

How to understand the reality of society exactly as it is?

2. Sovereignty of logic

1. The presumption was about Causal connections behind things. The 'is' ness of things'.

1. The presumptions behind 'causal laws', had become the defining standard for Social Sciences, due to Inductive Reasoning, as used by Rousseau. In his 'Social Contract' Theory, Rousseau had thought that something was incomplete in his understanding.

2. Modern Science begins with Descartes, who wanted to find the one core principle for all natural laws. He adopted Deductive Reasoning for his search. His view was that individuals are born a rational beings, who need only own mind and knowledge, to live in a society. The 'a priori' problem was to understand the packing and unpacking of the components of society and knowledge.

2. The obsession was to understand knowledge correctly and scientifically.

3. School of Wagers: saw the problem as 'Repacking of the components' of the 'is' ness of things. Pascal was an anti Descartes. He saw that Descartes' Representational Theory in his book 'Mind as a mirror', was interfering with Rationality. Mind separated the body from the world, then how could the world be understood through mirror image of reality in the Mind? Truth is within a person as much as it is outside. For example a tree. Objectivity of the tree becomes the Truth and Knowledge about it, in abstract mathematical terms. As such, first doubt every thing. Then validate.
3. Subjectivity, Objectivity and Empiricism as the tools in search of Knowledge

1. For Aristotle and Plato: Man was part of the Natural Order. The internal was sought to be understood through the external, as being a part of the whole. This view was a subjective perspective.

2. Objectivity was introduced by Descarte's book 'Meditations', that separated Man from Nature and placed him outside it. This turned Man as an external observer of Nature, and not its part. Achieving Objectivity was the Ideal. It did not provide the certainty needed to assert that objectivity is the only correct form for knowledge. Positivism separated the 'ought' from the 'is', because it separated man and value. Both got equated as the two objects of Science. But no new meaning emerged from positivism.

3. Empiricists method of seeking Knowledge was through 'Experiments': a temperature and pressure relationship. Science took the form of experiments only. Laws of science were found through repeated experimentation, that established processes for getting particular outputs.
12. METHODOLOGY included study of four aspects of each topic:

12.1 Interpretation method was followed in the Hermeneutical format (refer to paragraph 11 above) including Inductive and Deductive Thinking.

12.2 Same logical thinking was applied to living and nonlife forms. Began by reducing the object of study in to smaller units for getting to know the physical structure and its functioning. This increased the knowledge on the topic or area or object.

12.3 In study of values, deductive thinking was used.

12.4 The Behaviouralism Movement studied a range of behavior and emotions including senseless beings and beings that did not have any emotions but had responses, such as vegetables. Even witchcraft was studied in comparison to Science and its irrational practices were discarded.

13. Language became a limitation.

13.1 Language for Observation had been newly created, and everything observed was not yet converted in terms and words,
as the Designative Theory was not yet fully developed. History and Culture were all included under observation.

13.2 Karl Marx had adopted the Realist and the Rationalist Methodology to observe how surplus had been created, and how labour and capital were equal. **Dialectical challenge** of Marx included ‘Why does Capitalism believe in making profits?’ ‘Why do profits need to be made as per Capitalism?’ He argued that there were societies that did not give any importance to profits and surplus. Marx was a reductionist. He reduced problems to a single question or principle. For him determinism is the rationalistic residue.

13.3 Emmanuel Kant brought out the **Duality of Morality and Pure Reason** in all Action. Morality was practical reason. Pure reason was needed for deriving theory and laws. From the same principle one cannot derive two value statements of knowledge. The duality is in ‘is ness’ of a situation and its ‘should / ought ness’. A day is good. A day should be / ought to be good. In Scientific thinking the person must not be a part of the value judgement.

13.4 Weber did not adopt any methodology. He based his search for knowledge on **Positivism and Objectivity**. These were adopted for study of society as well as Nature. It was believed that society could be made scientific on basis of Science.

14. **ACTION** : The duality of ‘is’ and ‘ought’ made the thinkers realize that Science is a very distinctive activity, as it gives outputs of scientific principles that are applicable universally.

Society on the other hand was a reflection of the variety of life. Each life form varied in multiple ways. As such, life could not be reduced to scientific principles that could be tested to be applicable universally.
Science is a method that is not suited to the study of society. Society needed the quality of ‘empathy’ or ‘Verstehen’ method under which the scientist ought to empathize with the object of study. Therefore, Science should be kept separate from other realms of knowledge. Moreover, the studies that were not science could not be devalued or viewed as inferior to science.

This thinking divided the philosophy of Knowledge into two distinct, yet equally important realms. These were called ‘Study of Science’ and ‘Study of Social Sciences’. The new Hermeneutic method for study of Humans through Social Sciences was called ‘Verstehen’ method or the method based on empathy with the object.

15. PURPOSES AND VALUES:

15.1 The New Hermeneutic included the questions ‘What is knowledge? How? And Why? What would Objective and Subjective Sciences be? What would be the new value based methods?

15.2 OBJECTIVE: Science is objective partly because its area of study is nonlife material, and partly because, as per Descartes, the observer is separate and external to the material. The ‘Cause and Effect’ principle adopted for study of Science is also adopted for Law.

15.3 SUBJECTIVE: areas deal with life in all its forms, including Human life and Society. These areas are included in Social Sciences. New value based methods needed to be created to arrive at reality and truth in subjective sciences.

15.4 IDEAL-type method is a rationalist method based on how? and why? It has two components of Positivism and Hermeneuticist. Weber takes Social Sciences away from Science. He showed that Knowledge should be Objective even in Social Sciences.

Next phase continued in Part 4
Rationality and Reality: Part 3 of Philosophy of Social Science

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