

[1/30, 02:17] Ritajyoti Sir: [29/01, 3:45 PM] Alhad MS18: Could you elaborate this?

[29/01, 4:53 PM] Ritajyoti Bandyopadhyay: Read Kuh's Objectivity, Value Judgment and Theory choice. Available online. Will tell you the basic argument when I find a writing slot.

[29/01, 4:57 PM] Ritajyoti Bandyopadhyay: This itself can be a topic.

[30/01, 1:44 AM] Ritajyoti Bandyopadhyay: Theory choice was one of the key problems in PoS in the early and mid 20th century under the overwhelming influence of the state of the art controversial theories of relativity and (then) quantum physics. It entails the problem as to how scientists should choose between competing theories. The classical answer (from Popper, as you have already seen) would be to select a theory which is more falsifiable (by observation and experiments) and yet not falsified. If the two theories, for certain practical reasons, cannot be tested then a higher degree of empirical content in a theory will have to be chosen. At that point many logicians and philosophers proposed simplicity as a criterion for theory choice. One should choose the mathematically simplest and the most elegant approach over others. Subsequently, many scholars in this field felt that the criterion of simplicity is highly intuitive and subjective, and that it was difficult to settle certain acceptable grammar for theory choice. Popper's solution (as you have seen) has been criticised by Kuhn. He denied that competing theories can be evaluated in Popperian terms and substituted it by what he called the 'terms of pragmatic success'. In this context Kuhn wrote the piece titled 'Objectivity, Value Judgment and Theory Choice'.

[30/01, 1:48 AM] Ritajyoti Bandyopadhyay: In this, Kuhn proposed that there doesn't exist any 'unique algorithm' before a scientist to make an obvious choice between competing theories.

[30/01, 2:02 AM] Ritajyoti Bandyopadhyay: He argued that there could be at least 5 criteria for a scientist to make her theory choice: 'accuracy, consistency, scope, simplicity and fruitfulness'. A choice may be based on any one of these or at various combinations of these criteria and each of the criteria may embody subjective and context specific significance to a scientist. He writes, 'individually the criteria are imprecise: individuals may legitimately differ about their application to concrete cases. In addition, when deployed together, they repeatedly prove to conflict with one another; accuracy may, for example, dictate the choice of one theory, scope the choice of its competitor.'

[30/01, 2:09 AM] Ritajyoti Bandyopadhyay: Giving one of his many illustrations about the difficulty to come up with an objective understanding of any of the criteria:

Before Kepler's drastic revisions, Copernicus' system was hardly more accurate than the Ptolemaic system. Kepler's revision came 60 years after Copernicus' death!! Kuhn writes, 'More typically, of course, accuracy does permit discriminations, but not the sort that lead regularly to unequivocal choice' as Popper would want us to believe. He concludes, one theory may match experience better in one era, 'the other in another'.

[1/30, 02:25] Ritajyoti Sir: [30/01, 2:24 AM] Ritajyoti Bandyopadhyay:

<http://joelvelasco.net/teaching/3330/kuhn-objectivity.pdf>

[30/01, 2:25 AM] Ritajyoti Bandyopadhyay: Optional reading. Those who want more than what I wrote, can follow this piece.

[1/30, 02:30] Ritajyoti Sir: I hope nobody will say I didn't work hard to reach out to you. Still, if people want to meet me in groups, individually or in a special session, they should come up with a proposal. I can be contacted personally. Nobody can afford to fail in this course. The repeaters should get the info. Nobody contacted me so far and I don't see them in class regularly. Please pass the info on to them if you know...