Salmon’s Challenge to Popper

At Least Three Purposes for Prediction

Part of Practical Decision Making

Predictions are deductively generated from (i) statements of past and present events, and (ii) generalizations (theories)

Popper: a theory’s record of corroboration has no implications for the future performance of the theory (no predictive content), and cannot inductively justify the theory

Salmon’s Problem of Rational Prediction:

(i) Given underdetermination, there is always an infinite array of available theories consistent with (and implying) past experience

(ii) When we combine this with Popper’s view of corroboration, we get...

(3) for Popper, there is nothing to justify one choice of theory over any other

(4) So Popper’s view precludes rational prediction

Popper: It is rational to prefer (though not rely on) the theory which has survived the most stringent tests and criticism

Salmon: This is rational only if some implicit appeal to induction is made

Pragmatic Anti-Inductivism: An Alternate Response to Salmon

Premise (1), while strictly true, is irrelevant. In typical contexts of practical prediction, the possibility of choosing between theories rarely arises. Instead, only one theory is available to the actor—namely, the one that has survived the most stringent tests and criticism.

Given that one has to act, one should use the tools available.

So it is rational to use the theory at hand—namely, the one that has survived the most stringent tests and criticism.

In rare cases, more than one theory is available, but presumably neither has been refuted, so neither choice would be irrational.

In such cases one may appeal to other pragmatic principles to generate a preference—e.g., simplicity, generality, ease of use.

Thus, use of the most well-corroborated theory is pragmatically, non-inductively rational.

Does this smuggle in any inductive methods?