

Discussion Questions: Dynamic Dutch Books

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Readings:

- Sections 1, 2, 5.1, and 6 of Brian Skyrms. “Dynamic Coherence and Probability Kinematics.” *Philosophy of Science*. 54(1):1-20, 1987.
- Pages 193-204 of Isaac Levi. “The Demons of Decision.” *The Monist*, 70(2):193-211, 1987.
- Pages 43-44 of Savage. *Foundations of Statistics*.

On Skyrms and Savage:

1. On page 2, Skyrms claims, “There is a coherence argument, given explicitly by de Finetti, for the ratio definition of conditional probability.” What is the conclusion of de Finetti’s argument? What are the assumptions, and how does the argument work?
2. Why does Skyrms claim de Finetti’s argument fails to justify the “rule” of conditionalization?
3. How is conditional probability defined in Savage’s *Foundation of Statistics*?
4. On page 44, Savage claims, “... conditional probability given B can be expressed temporally. $P(C|B)$ can be regarded as the probability a person would assign to C after he observed that B obtains.” Why does Hacking think Savage’s arguments do not justify the “dynamic assumption” of personalism?
5. Why does Hacking think a dynamic Dutch book argument is impossible? What extra “structure” does Skyrms’ add to make such an argument possible?
6. In what ways is Skyrms’ argument similar to and different from de Finetti and Savage’s arguments?

On Levi:

1. What is the unacceptable “rigidity” that Levi thinks diachronic Dutch book arguments entail?
2. What is a “confirmational commitment”? What is “confirmational tenacity” and why might Levi find it to be unattractive?