PROBABILITY AND THE LAW

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READING GUIDE – WEEK #5

Smith v. Rapid Transit (1945).   Read the *Smith* case first. It is short, two pages only. Make sure you ponder the Court's statement that "it is not enough that mathematically the chances somewhat favor a proposition to be proven." Keep in mind that this is a civil case (not a criminal case), so the governing standard of proof is 'preponderance of the evidence' (not 'beyond a reasonable doubt').

Thomson (1986).   Once you've read the *Smith* case, you can turn to Thomson's article.

> (section I: pp. 199-200) A hypothetical scenario loosely based on the *Smith* case. The scenario should suggest that even if the chances that the defendant has caused harm are greater than 0.5, we are still unwilling to find him liable (even in a civil case). Why?

> (section II: pp. 200–202) Another hypothetical scenario, but this time we are dealing with a criminal case. The scenario should suggest that even if the chances that the defendant has committed a crime are greater than 0.9 (or another arbitrarily high value), we are still unwilling to convict. Why?

> (section III: pp. 202–206) Here Thomson introduces the idea of *individualized evidence*, suggesting that the evidence against a defendant should be *causally connected* with the event under dispute (injury, killing). What role does causality play in Thomson's reasoning?

> (section IV: pp. 206–213) A digression on the question 'what is knowledge?' You may skip most of it, but consider the lottery example on page 207. In what way does it resemble the hypothetical scenarios in section I and section II?

> (section V: pp. 213–215) Here you find Thomson's rationale for why a conviction based on pure mathematical chances is unacceptable. She says (p. 214) that a verdict of guilty cannot be correct as a matter of mere luck; rather, the verdict's correctness must rest on a guarantee. What is a guarantee here? How does the notion of a guarantee relate to the notion of causality in section III?

> (sections VI-VII: pp. 215–end) A discussion of issues related to *Collins* (and implicitly, issues related to DNA evidence, though in 1986 DNA profiling had just been discovered). You may skip it.

Response paper.   In the response paper for this week, you are required to do *two* things.

First. Write a crisp, succinct, and precise summary of Thomson's main point (not a summary of the article). This need not be long at all. You can say something like 'Thomson believes that a conviction on the basis of mere mathematical chances is not acceptable because...' Alternatively, you could say 'Thomson understands the standard of proof to be so-and-so, and consequently, she thinks that a conviction based on mere mathematical chances is not acceptable because....' I suspect that a fine answer will contain some of the following words (or variations thereof): causality, individualized evidence, luck, guarantee, probability.

Second. On page 205, Thomson writes that "numerical or statistical evidence too can be causally connected in an appropriate way with the (putative) fact it is presented to support." She then discusses a discrimination case. How does the statistical evidence in the discrimination case differ (in legally and epistemologically relevant ways) from the statistical evidence in the hypothetical scenarios in section I and section II? What does Thomson mean by 'causally connected in an *appropriate* way'? What would be an inappropriate way for a piece of evidence to be causally connected?