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Philosophy 800: Tutorial
Ben Eggleston—eggleston@ku.edu
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notes on Hawthorne's "The Case for Closure"

Here is some information that might help you as you read Hawthorne's paper.

1. On p. 27.9, in the clause

   > we should hardly be surprised if he were to know its consequent though not its antecedent

   the words 'consequent' and 'antecedent' are apparently reversed.

2. On p. 28.3, Hawthorne writes that one problem with version 3 of the closure principle

   > flows from the thought that one cannot always know the logical consequences of the propositions that one knows on account of the fact that small risks add up to big risks.

   He goes on to say that this thought is pertinent in the context of a theory of knowledge in which probabilities figure in a certain way. Here is an illustration of what he is talking about. Suppose we have a theory of knowledge on which your subjective probability of the truth of a proposition has to be at least 90 percent in order for you to know it. (Other conditions might need to hold as well, of course.) Now suppose you believe that the probability of P is 93 percent, and that the probability of $P \supset Q$ is 92 percent. Then the probability of Q, derived from P and $P \supset Q$ by *modus ponens*, is $0.93 \times 0.92 = 85.56$ percent. Here small risks (of 7 percent and 8 percent) add up to a big risk (of more than 14 percent). The big risk is big enough to keep the conclusion of the argument from being known, even though the premises' small risks were small enough to allow them to be known.

3. On p. 29.1, Hawthorne refers to the 'necessity of origins principle'. This is, roughly, the principle that any given object necessarily originated in the way that it did—otherwise, it would be a different object. Hawthorne appeals to this in order to be able to put 'Necessarily' before the proposition that Ivan Paderevski is Bob Paderevski's father if Fred Paderevski is Bob Paderevski's brother. (He wants to be able to do that, recall, because both 3 and 3'—the closure principles under discussion here—involve the subject's knowing that *necessarily* $P \supset Q$, not just that $P \supset Q$.)

4. On p. 32.2, Hawthorne mentions the following proposition:

> g is full of wine and ~g is full of non-wine that is colored like wine.

That proposition should be read as follows:

> g is full of wine and ~(g is full of non-wine that is colored like wine).

That is, Hawthorne is waiving the convention (which you may have been taught in introductory logic) that when a multi-symbol expression is being negated, then the whole expression should be put in parentheses. In the rest of the paper, use context to figure out the scope of Hawthorne's negations.