

## Problem Set #7

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Wed, 6 Apr 2005: Problem Set #7, due next Wednesday at noon.

Consider an example with one definite description embedded in another:

*The killer of the black cat escaped.*

1. Draw the syntactic structure of this sentence. Make sure that you draw a structure that is interpretable in our system.
2. Describe three possible states of affairs:
  - one where the sentence is false;
  - another one where the sentence has no truth-value because "the black cat" does not refer to anything;
  - a third one where the sentence has no truth-value, but this time because "the killer of the black cat" does not refer to anything even though "the black cat" does
3. Give a lexical entry for "killer", which will work in this sentence (for this, you will have to think about the semantic composition of the sentence, but you don't have to hand in the entire calculation -- just give the meaning for "killer")