

Predicate Logic, Part 2

Dave Dubin

February 13, 2017

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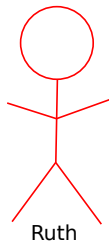
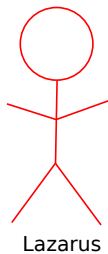
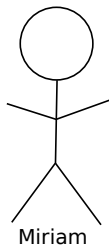
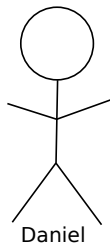
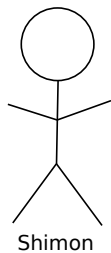
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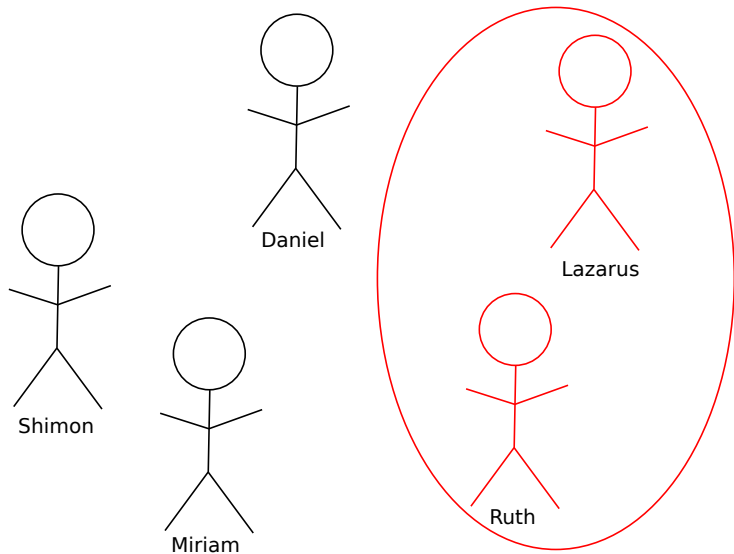
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 - The expression $\forall x\forall y(Cxy \rightarrow Bx)$ won't work, since that would be “blessed is he who considers anyone.”
 - Using a propositional constant like p presents a problem, but not because it represents an individual. An individual can be any identifiable thing in our domain, including a group.

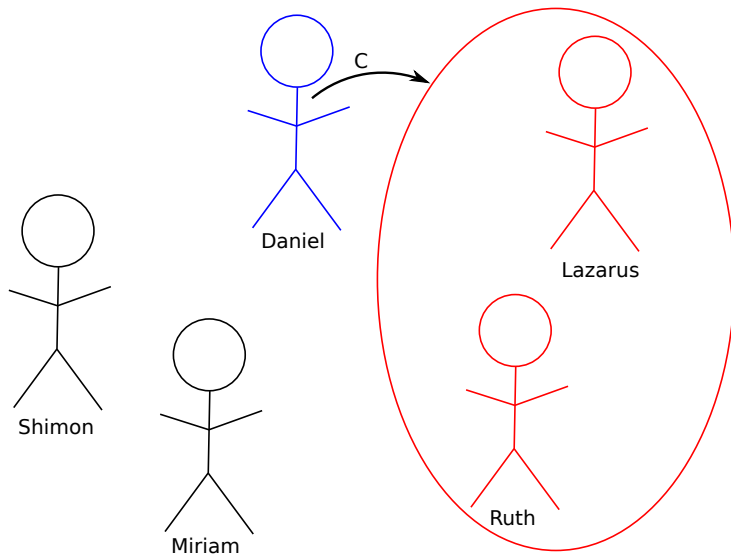
Domain diagram



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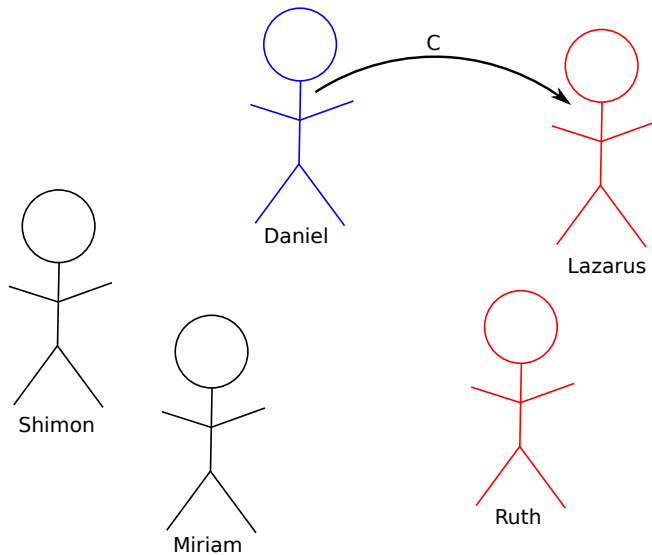
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- The next formulation we might consider is $\forall x \forall y ((Py \wedge Cxy) \rightarrow Bx)$, where Py means “ y is poor.”
- This could be paraphrased “Everyone is blessed who considers any of the poor.”

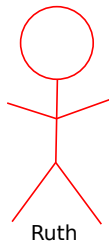
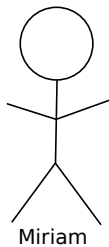
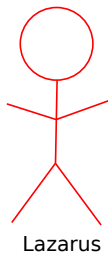
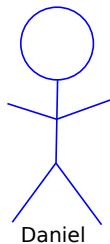
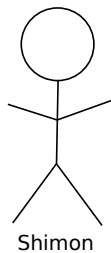
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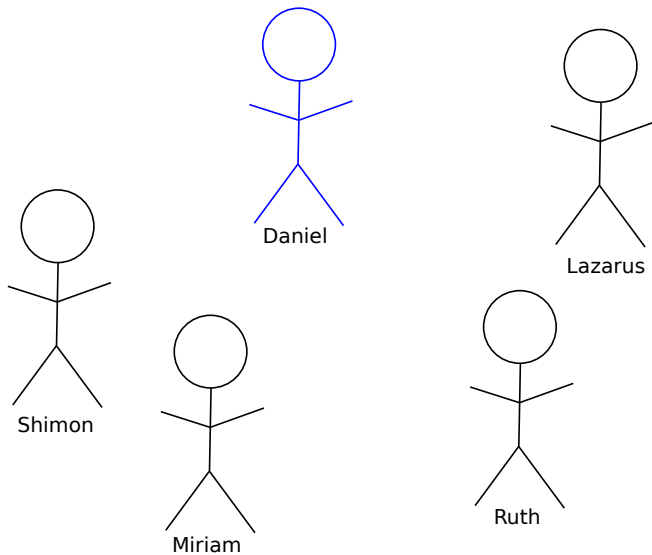
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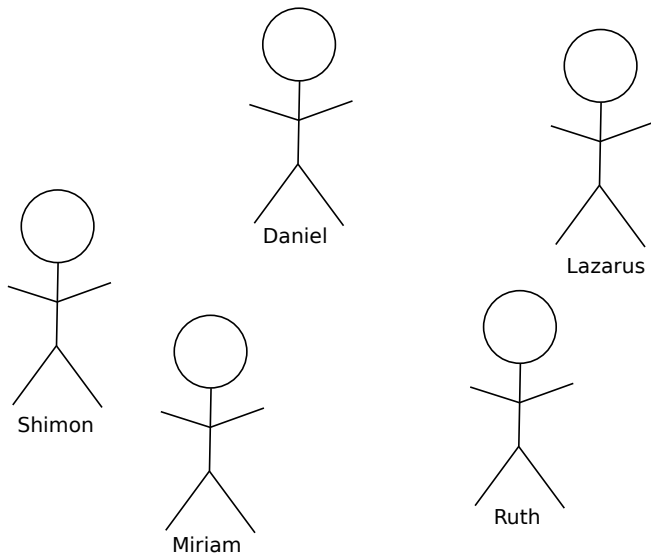
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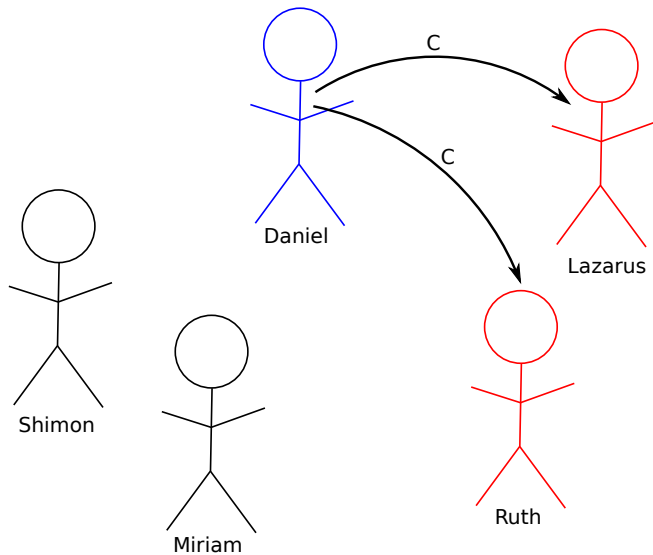
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- The third proposal, in which we're blessed only if we consider the poor, also could be true in a world without poverty, provided it's also a world without blessings.

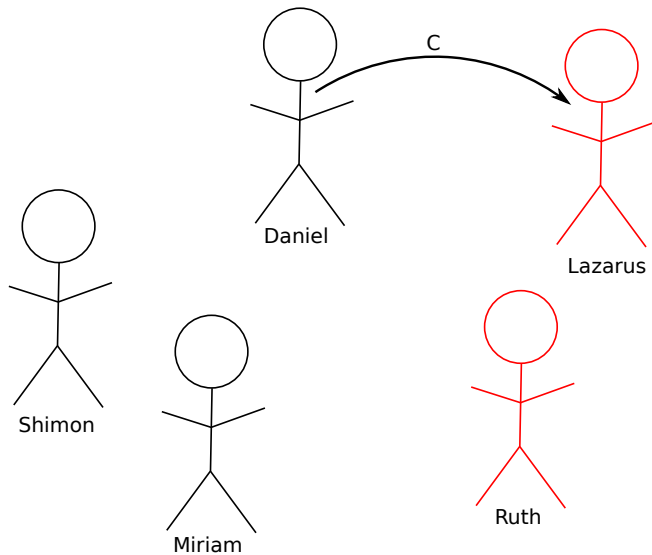
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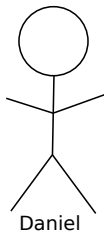
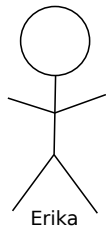
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Tuesday at noon (instant)

Domain diagram

