

# M06 · Entailment (Key)

Course in Semantics · Ling 531 / 731  
McKenzie · University of Kansas

*Module M, Lecturelet 06*

## 1 Key questions

Here are five questions you should be able to answer after you've seen the video.

1. What does it mean for one proposition to entail another?
2. How can we distinguish upward from downward entailment?
3. What are some expressions that trigger upward entailment?
4. What are some expressions that trigger downward entailment?
5. How can we characterize "Negative Polarity Items" in terms of entailment?

## 2 Exercise

1. For each of the following pairs of propositions, indicate the correct relation between them among the choices provided.

1. P : A Doberman is barking outside  
Q : A dog is barking outside  
a) P upward entails Q      b) P downward entails Q      c) P does not entail Q
2. P : Nobody at the party touched the punch.  
Q : No kids at the party touched the punch.  
a) P upward entails Q      b) P downward entails Q      c) P does not entail Q
3. P : A Doberman is barking outside  
Q : A Doberman is barking  
a) P upward entails Q      b) P downward entails Q      c) P does not entail Q
4. P : Ozzie ate a sandwich  
Q : Ozzie ate a meatball sub  
a) P upward entails Q      b) P downward entails Q      c) P does not entail Q

5. P : The Pope set foot in the Louvre  
Q : The Pope lived in Paris  
a) P upward entails Q      b) P downward entails Q      c) P does not entail Q
6. P : The Pope set foot in the Louvre  
Q : The Pope set foot in France  
a) P upward entails Q      b) P downward entails Q      c) P does not entail Q
7. P : Nobody at the party touched the punch.  
Q: No kids at the party touched the punch.  
a) P upward entails Q      b) P downward entails Q      c) P does not entail Q
8. P : Our Doberman is barking outside  
Q : Our Doberman is barking in our backyard  
a) P upward entails Q      b) P downward entails Q      c) P does not entail Q
9. P : One guest refused to sit anywhere.  
Q: One guest refused to sit at a table.  
a) P upward entails Q      b) P downward entails Q      c) P does not entail Q

answers: A, B, A, C, C, A, B, C, B

2. For each of the following propositions, provide one expression that it upward entails, and one that it downward entails. Mention which part of the proposition triggers the entailments.

1. One guest refused to sit anywhere  
UE: Someone refused to sit anywhere (one guest  $\Rightarrow$  someone)  
DE: One guest refused to sit at a table (anywhere  $\Rightarrow$  at a table)
2. Every doctor prescribed amoxicillin  
UE: Every doctor prescribed an antibiotic (amxocillin  $\Rightarrow$  an antibiotic)  
DE: My doctor prescribed an antibiotic (every doctor  $\Rightarrow$  my doctor)
3. Terese had not noticed any children on her run  
UE: Terese had not met any Girl Scouts on her run (not noticed  $\Rightarrow$  not met)  
DE: Terese had not noticed any Girl Scouts on her run ((some) children  $\Rightarrow$  Girl Scouts)