2010 Solutions

(M) No smoke without fire (1/2)

M1. **For any given pair of sentences, the entailment and presupposition relationships may or may not hold, together or separately**.

    a. A pair of sentences in which sentence A **neither entails nor presupposes** sentence B.
        A.   Shaun White is a Winter Olympian.
        B.   The 2010 Winter Olympics were in Vancouver.

Explanation: Sentences A and B are unrelated.

Entailment: Given that sentence A is true, there is no way to know whether sentence B is true or false. If Shaun White is a Winter Olympian, the 2010 Winter Olympics may or may not have taken place in Vancouver. Thus, there is no entailment relationship between these two sentences.
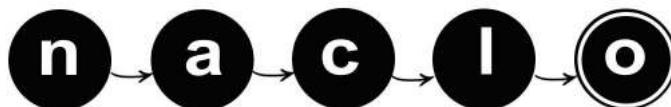
Presupposition: When uttering sentence A, a speaker would not take sentence B for granted (or assume that sentence B is background information against which the truth or falsity of sentence A would be judged). A speaker would not utter "Shaun White is a Winter Olympian" and assume the belief/take for granted that the 2010 Winter Olympics were in Vancouver.

    b. A pair of sentences in which sentence A **entails and presupposes** sentence B.
        A.   Shaun White continues to rule the halfpipe
        B.   Shaun White had been ruling the halfpipe.

Entailment: If sentence A is true, sentence B is necessarily true. The entailment relationship between these sentences relies on the meaning of the verb *continue* – to *continue to rule* the halfpipe, Shaun White had to be ruling the halfpipe already. Thus, sentence A entails sentence B.

Presupposition: When uttering sentence A, a speaker would take sentence B for granted (or assume that sentence B is background information against which the truth or falsity of sentence A would be judged). A speaker who utters "Shaun White continues to rule the halfpipe" assumes the belief/takes for granted that Shaun White had been ruling the halfpipe. Thus, sentence A presupposes sentence B.

(M) No smoke without fire (2/2)

M1. **For any given pair of sentences, the entailment and presupposition relationships may or may not hold, together or separately**.

c. A pair of sentences in which sentence A **presupposes but does not entail** sentence B.
   - A.   I did not see Shaun White win the gold medal in the 2010 Winter Olympics.
   - B.   Shaun White won the gold medal in the 2010 Winter Olympics.

Entailment: If sentence A is true, sentence B *may or may not* be true. The absence of an entailment relationship between these sentences relies on the words "did not see" – if it is true that I *did not see* Shaun White win the gold medal, then Shaun White may or may not have won the gold medal. Thus, sentence A does not entail sentence B.

Presupposition: When uttering sentence A, a speaker would take sentence B for granted (or assume that sentence B is background information against which the truth or falsity of sentence A would be judged). Specifically, a speaker who utters "I did not see Shaun White win the gold medal in the 2010 Winter Olympics" assumes the belief that Shaun White did actually win the gold medal in the 2010 Winter Olympics. Thus, sentence A presupposes sentence B.

d. A pair of sentences in which sentence A **entails but does not presuppose** sentence B.
   - A.   Shaun White did not win the gold medal in the 2010 Winter Olympics.
   - B.   Shaun White did not both win the gold medal in the 2010 Winter Olympics and injure his ankle.

Entailment: If Shaun White did not win the gold medal in the 2010 Winter Olympics, then he necessarily did not *both* win that gold medal *and* injure his ankle, since he definitely did not win the gold medal.   If one fact is not the case (the fact presented in sentence A), then both facts cannot be the case, either (the fact presented in sentence A + the new fact added to it in sentence B).   Thus if sentence A is true, sentence B is *necessarily* true. Thus, sentence A entails sentence B.

Presupposition: When uttering sentence A, a speaker would not take sentence B for granted (or assume that sentence B is a background against which the truth or falsity of sentence A would be judged). Specifically, by uttering "Shaun White did not win the gold medal in the 2010 Winter Olympics" a speaker could not assume the belief that Shaun White did not both win the gold and injure his ankle, or that Shaun White either won a gold medal or injured his ankle. Whether Shaun White injured his ankle would not be information taken for granted when uttering "Shaun White did not win the gold medal in the 2010 Winter Olympics." Thus, sentence A does not presuppose sentence B.