### **Definitions**

Entailment: Proposition A entails proposition B if the truth of A guarantees the truth of B.

<u>Implicature</u>: Proposition A is an **implicature** of proposition B if B is inferred from A given the context, but B is not necessarily true.

Presupposition: A proposition B is a **presupposition** of proposition of A if proposition B is a precondition on the truth A falsity of A.

Tests to help diagnose the type of inference.

### Cancellability:

Intent: test whether B is an implicature of A

Test to perform: consider 'A and not B'

Interpretation of result: if A can still be true, B is an implicature if it was derived from context and there is no relation if B was not derived from context; otherwise, B is an entailment or presupposition.

## Negation:

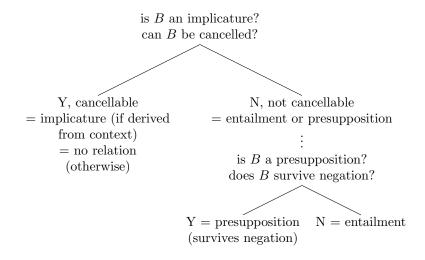
 $\underline{\text{Intent}}$ : test whether B is an entailment or presupposition of A

Test to perform: Assume 'it's not the case that A' is true

Interpretation of result: if B must still be true, B is a presupposition; otherwise, B is an entailment. We say presuppositions survive negation.

# Work flow / decision tree

Given an utterance A, want to know about the relationship proposition B has with A



**Exercise 1**: For each entailment, implicature and presupposition, demonstrate their status with the relevant test(s) from above. Take only the relevant part of the A utterance when performing the tests.

<u>Context</u>: Shannon is an aspiring musician. He has spent the past year and a half developing a record of a genre that he calls 'experimental classical', where he takes famous classical music pieces, inverts the order of the notes, plays every instrument on a synthesizer and reads magical realism poetry over it. He says it's the future. He calls his good friend Skip over to have a private listening party, just before he thinks he is going to take the world by storm. He plays the title track 9 Mahler for Skip, and he asks for Skip's opinion. Skip says the following:

A UTTERANCE: There are a lot of instruments playing here, and I noticed how you really took time to emphasize the synthesizer in this track.

## B candidates:

- 1. Skip didn't like Shannon's work.
- 2. Shannon took time to emphasize the synthesizer.
- 3. Shannon tried to collaborate with Zubin Mehta.
- 4. There was sound in the song.

<u>Context</u>: Shadow loves to eat. Cici (pronounced [sisi]) is Shadow's friend and is inviting him over to her place for dinner for the first time. She knows he has a stomach on him, but she didn't realize that it was basically bottomless. She makes him three full plates of spaghetti carbonara, which he devours, and they shared the plate of cornbread that he made for the dinner. By shared it, Shadow had seven of eight pieces. He then gets up and looks in her fridge for some more food, and she says the following:

A UTTERANCE: I have fruit in the fridge, as well as ice cream in my mini-fridge if you are feeling dessert, but you must almost be full at this point, my friend.

## B candidates:

- 1. There is food in the fridge.
- 2. Shadow actually doesn't like ice cream.
- 3. Cici has a mini-fridge.
- 4. Cici would like Shadow to stop eating.

Context: Yilmaz and Yildiz are identical twins; but, plot twist, they were separated at birth. Yilmaz grew up in rural Indiana, and Yildiz grew up in Germany. Yilmaz was an academic, and Yildiz was a professional ballroom dancer. Not-so-random fact: Yildiz had a penchant for drag racing sports cars at night on the Autobahn and was part of an underground street racing crew — all of this unbeknownst to Yilmaz. When Yilmaz came to age, his primary guardian, called Granny, told him about his twin brother. Fast forward a year. Yilmaz flew his brother Yildiz to Indiana to meet him and his Granny. After a couple of days in town, Yildiz asked Yilmaz if he could drive him and Granny around on their errands that day, and Yilmaz obliged, thinking the stakes were low as they were identical twins after all, so the worst-case police ticket scenario was not bad (Yilmaz is typically more risk-averse, but this was his twin brother separated at birth we're talking about). He let him have the keys to his sports car. Yildiz straps Granny in — she's riding shotgun, out of respect — and then Yildiz punches it and takes off down the empty country road, breaking 90 mph (which he did not mistake for 90 kmh). Yilmaz is shocked, speechless when they arrive at Meijer's (grocery store), and then Granny says the following:

A UTTERANCE: We traveled very fast back there, Yildiz. I don't recall ever going that fast on that road, and, quite frankly, I regret not making that appointment with my chiropractor today.

### B candidates:

- 1. They moved from one location to another.
- 2. Granny didn't make an appointment with her chiropractor.
- 3. Yildiz shouldn't have effectively drag-raced with Granny.
- 4. Yildiz was hungry, so he wanted to get to Meijer's quickly.

**Exercise 2**: Determine the status of each B utterance with respect to the A utterance, demonstrating with the relevant test(s).

1.		Elvis stole some of the money. Elvis didn't steal all of the money.
2.	A: B:	Gabriella is in Chicago. Gabriella is in the U.S.A.
3.		Gabriella is in the U.S.A. Gabriella is in Chicago.
4.		Luther knew that Alexander came to the party.  Alexander came to the party.
5.		I don't know that Alexander came to the party.  Alexander came to the party.