

# Pragmatics

BCS 152

November 6 2018

A: Do you want coffee?

B: I'd love some *caffeine*.

Does B want coffee?

How do you know?

# What's the point of language?

# What's the point of language?

- Speakers have an intent to accomplish something with the words they speak
- Listeners figure out what a speaker meant by reasoning about their intentions

A: Do you want coffee?

B: I'd love some *caffeine*.

# Roadmap for next 3 lectures

- Today: what information can speakers convey beyond the literal meaning of a sentence? How do listeners infer those meanings?
  - Speech Acts
  - Gricean Maxims
  - Semantic vs. Pragmatic Inferences
  - Prosody
  - Common Ground

# Roadmap for next 3 lectures

- Next Monday: how do listeners figure out a speaker's intentions and use that to infer what they mean?
- Next Wednesday: how do speakers use common ground to make easier-to-understand sentences for their listener?

# Speech Acts

- Every time we speak, we're *doing* something



# Types of Speech Acts (Searle)

- Representative: The speaker is conveying their belief that a statement is true
  - ‘The sky is blue’
- Directive: The speaker is trying to get the listener to do something
  - ‘Pass the salt’
- Commissive: The speaker commits themselves to a future action
  - ‘I’m going to the store tomorrow’

- Declarative: The speaker brings about a new state of affairs
  - ‘I now pronounce you husband and wife’
- Expressive: The speaker wishes to reveal his or her psychological state
  - ‘I’m sorry to hear that Boris only rides a bicycle.’

# 3 Forces of a Sentence (JL Austin)

- Locutionary Force - what the sentence literally means
- Illocutionary Force - what the speaker is trying to *do* with the sentence
- Perlocutionary Force - the effect the sentence actually has on the listener

# Pragmatics

- The study of how we understand language beyond the *literal* meaning

# What are the 'rules' of conversation?

- Politeness (Brown & Levinson)
- Conversational maxims (Grice)

# Politeness Theory (Brown & Levinson)

- We all have a public ‘face’
- We want everyone to be thought of positively, so we are always trying to ‘save face’ or ‘give face’

# Politeness

Can you pass the salt?

Is the salt at your end of the table?

*Indirect* request to pass salt in order to be polite

# Politeness

A: How did Louisa's presentation go?

B: Well, she's had a cold for the last two weeks and she missed the bus into work...

→ Louisa's presentation probably did not go well

B is 'giving face' to Louisa by:

- not directly saying her presentation was bad
- giving an explanation that places the blame of the bad presentation on external factors



# Gricean Maxims

- Assume your interlocuter is *rational* and *cooperative*
- Maxims for good communication:
  - Quality - tell the truth/don't lie
  - Quantity - don't say too little and don't say too much
  - Relevance - say something related to the conversation
  - Manner - say things in a clear way

# Quality

- Try to make your contribution true
- Truthfulness: Don't say what you believe to be false
- Evidencedness: Don't say something for which you don't have adequate evidence

# Quality

A: What degrees does Richard have?

*(B knows that Richard has a bachelor's degree and was working on a master's, but doesn't know if he finished it yet)*

B: He has a bachelor's degree.

B: He has a bachelor's and a master's.

B: He doesn't have any degrees.

B: He has at least a bachelor's.

# Quantity

- Don't say too little or too much; make your contribution as informative as required

A: How is your binge-watching of *Chef's Table* going?

*(B has seen all the episodes)*

B: I've seen all of them.

B: I've seen some of them.

# Relevance

- Making your contribution relevant to the conversation

# Manner

- ‘I expect a partner to make it clear what contribution he is making, and to execute his performance with reasonable dispatch.’ -Grice (1975)
  - maybe he should follow his own advice...
- Boils down to: be clear and unambiguous, and don't say things in a roundabout way
  - Incorporates elements of Quantity and Relevance as well

# Manner

- We all have that one friend/acquaintance who uses crazy huge words and doesn't make any sense
  - What purpose does this serve?

# Manner

A: How do you get to campus?

B: I bike.

B: The streets.

B: I use my bicycle to ride there.

B: I take Linden to Mt. Hope, then I take McLean to get down to the river trail.

B: First I unchain my bike from its safe and secure position. Then I roll up my pant leg for safety, because my friend once fell after getting his pants leg stuck in the chain. Then I get on my bike and start pedaling....



# Flouting maxims to imply a different meaning

A: Will Shaorong go to the party?

B: Is the Pope catholic?

How is the Pope being catholic relevant to the conversation?

→ drawing an analogy

# Flouting Maxims

*Context: a professor's recommendation letter for Joe's job application.*

Sentence: Joe has excellent penmanship.

Penmanship isn't relevant to most jobs nowadays!

Implies that the recommender didn't have anything good to say that was relevant

# Flouting Maxims

*Context: Wednesday, playing outfield, spectacularly misses an easy fly ball.*

Sentence: Wow, Wednesday is *such* a good softball player!

Violates Quality to convey a sarcastic meaning

# Flouting Maxims

At the concert last night, the singer produced a series of sounds that somewhat corresponded to the score of “The Star-Spangled Banner.”

Violates Manner

Implies the singer wasn't very good

Activity: Which Gricean maxim(s) does B violate? What meaning is the speaking trying to convey?

(1) A: Is Dan dating anyone these days?

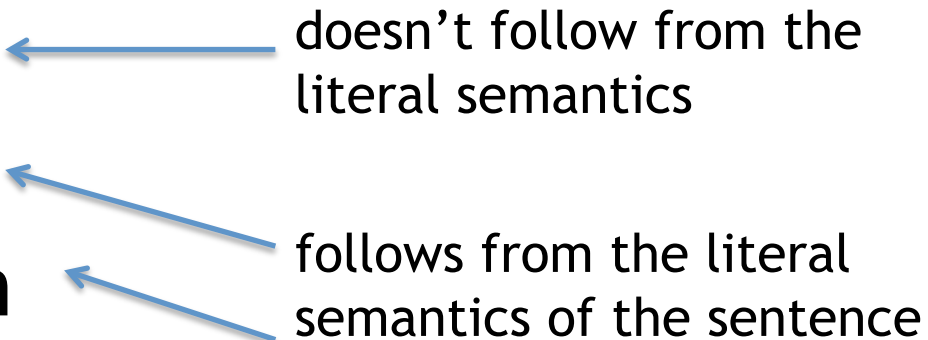
B: Well, he goes to Syracuse every weekend.

(2) A: Who did you vote for yesterday?

B: Well, I spent a lot of time researching everybody, and you know, it was a really tough decision, and I spent a lot of time thinking about it and when I got to the ballot box yesterday I was really unsure and blah blah blah...

How do we make inferences about  
sentences?  
Entailment, Presuppositions, and  
Implicature

# Semantic vs. Pragmatic Inferences

- Implicature
  - Entailment
  - Presupposition
- ← doesn't follow from the literal semantics
- ← follows from the literal semantics of the sentence
- 

# Entailment

Mary broke the window.

*entails*

The window broke.

I went to the store yesterday.

*entails*

I went somewhere.



# Entailment

I went to the store yesterday. But I didn't go anywhere.

???!!! not possible

# Presupposition

The king of France is bald.

***presupposes***

The king of France exists.

Luca loves Ivano's pink car.

***presupposes***

Ivano has a pink car.

# Presupposition vs. Entailment: The S Family Test

- Negation
- Question
- Embedding under modals (might, could, should)
- Embedding under conditional (if-clause)

- Original: Luca loves Ivano's pink car.
- Luca doesn't love Ivano's pink car.  
(negation)
- Does Luca love Ivano's pink car?  
(question)
- Luca might love Ivano's pink car. (modal)
- If Luca loves Ivano's pink car, he should tell him. (conditional)
- **Does Ivano still have a pink car in all these cases?**

- Original: Mary broke the window.
- Mary didn't break the window. (negation)
- Did Mary break the window? (question)
- Mary might have broken the window.  
(modal)
- If Mary broke the window, she should pay for the damages.(conditional)
- **Did the window still break in all these cases?**

# Implicature

Some of the students passed the test.

*implicates*

Not all of the students passed the test.

Because of Grice's Quantity Maxim (why?)

# Entailment vs. Implicature

- Implicatures are *cancellable*
- Some of the students passed the test. In fact, all of them did.
  - cancels the implicature ‘some but not all’
- Mary broke the window. But the window didn’t break.
  - ???!!!

# Activity: Entailment, Presupposition, or Implicature?

Bill lost his wallet.

- Bill lost something.
- Bill exists.
- Bill had a wallet.

Most of Wednesday's friends are grad students.

- Not all of Wednesday's friends are grad students.
- Wednesday has friends.



# Types of Implicature

- Conventional
  - typical implicatures triggered by specific words
  - e.g., scalar implicatures (some, most, number words, etc.)
- Conversational/ad-hoc
  - sentence causes an implicature in a specific context

# Conventional Implicature: Quantity Implicature

- Some words seem to automatically ‘trigger’ an implicature
- Some students passed the test → implicates that *not all* students did
- Jim has 14 children → implicates that Jim has 14 children *and no more*
- Even though the literal meaning of ‘some’ is ‘at least 1’ and ‘14’ is ‘at least 14’

# Conventional Implicatures

- These words don't *always* trigger the 'not-all' meaning

*A and B pull up to a parking garage and the cost is \$5. A has \$20 in their wallet.*

A: I have \$5.

→ does NOT implicate that A has no more than \$5

# Conventional Implicatures

- These words don't *always* trigger the 'not-all' meaning

*B is grading exams but hasn't finished yet.*

A: How are the exams looking?

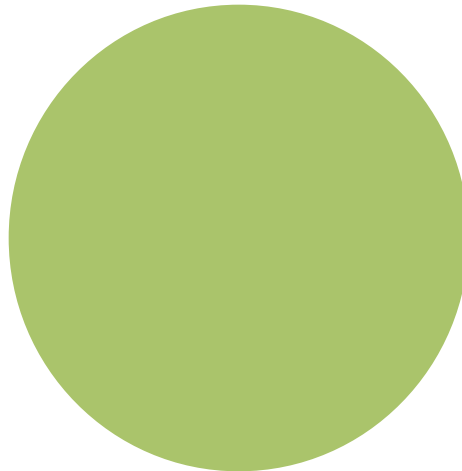
B (pointing to the whole stack): Some of these have passing grades.

→ does NOT necessarily implicate that not all of the exams were passed.

# Ad-Hoc Quantity Implicature

A: 'green'

Which object is A referring to?

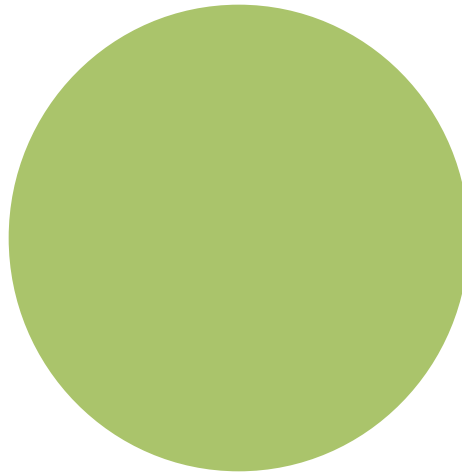


# Ad-Hoc Implicature

uniquely  
identifiable by  
'blue'



uniquely  
identifiable by  
'circle'



- If they meant the circle, they would have said 'circle'!

- Here, the implicature comes from the visual context
- Nothing inherent about the word ‘green’ that triggers an implicature



# Implicature is all about what you *could have said instead*

- ‘Some of the students passed the test.’
  - If you meant *all*, you would have said ‘all’!
- If speakers are being as *informative* as required, they shouldn’t say worse alternatives!

Using prosody to convey non-  
literal meaning

A: Do you want coffee?

B: I'd love some *caffeine*.

Does B want coffee?

How do you know?

A: Do you want coffee?

B: I'd *love* some caffeine.

Does B want coffee?

How do you know?

Bob went to the restaurant.

BOB went to the restaurant.

Bob WENT to the restaurant.

Bob went TO the restaurant.

Bob went to THE restaurant.

Bob went to the RESTAURANT.

- Why do these sentences seem to mean slightly different things?

# Question Under Discussion (QUD)

- Can think of a sentence as answering an explicit or implicit ‘question’

Who went to the restaurant?

BOB went to the restaurant.

Bob went to the RESTAURANT.

→ sounds weird

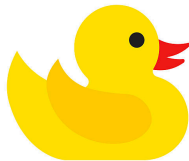
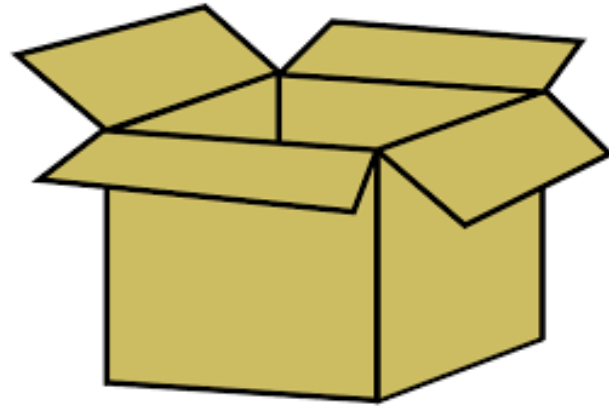
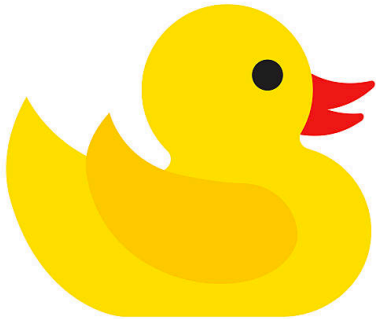
# Experimental Pragmatics



- So...how do we study how people make all of these crazy inferences?
- Most common way: study *reference*
- It's easier to study cases where a speaker is clearly trying to refer to a concrete object in the world!

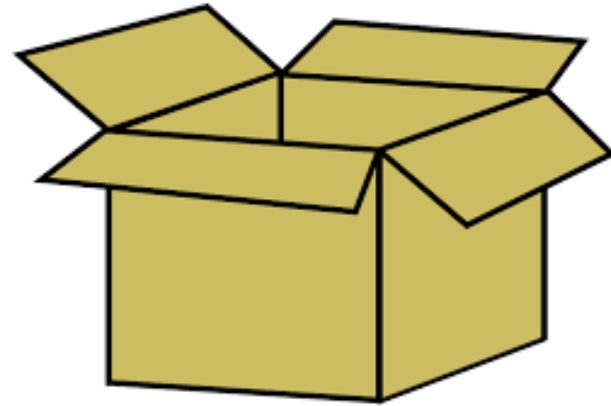
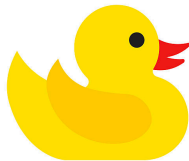
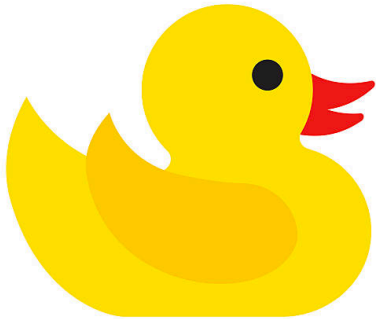
# Example: Quantity Implicature

‘Click on the big...’



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‘Click on the big...’

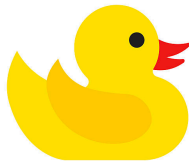
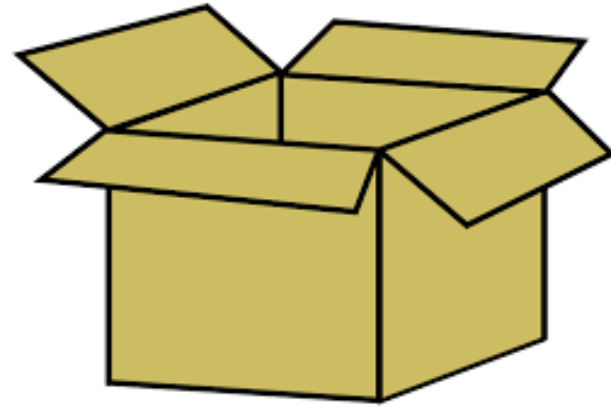
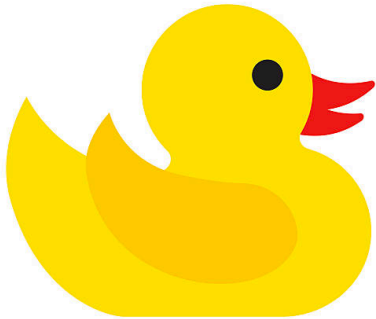


‘big’ is over-informative



# Example: Quantity Implicature

‘big’ should refer to the big duck

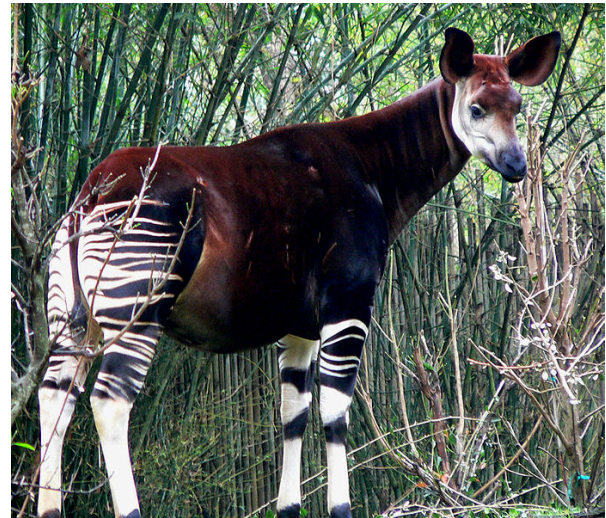


- Can measure with eye-tracking *whether* and *how quickly* people make these inferences

‘It looks like a zebra.’

‘I LOOKS like a zebra.’

→ which one is more likely that it is a zebra?



# Roettger & Franke (2018): How fast can people use prosody to predict reference?

‘Did the wuggy pick up the violin?’

...

‘The wuggy HAS picked up the violin.’

‘The wuggy has picked up the PEAR.’

‘Did the wuggy pick up the violin?’

expectation  
confirmed

...

‘The wuggy HAS picked up the violin.’



‘The wuggy has picked up the PEAR.’



expectation  
violated

‘What happened?’

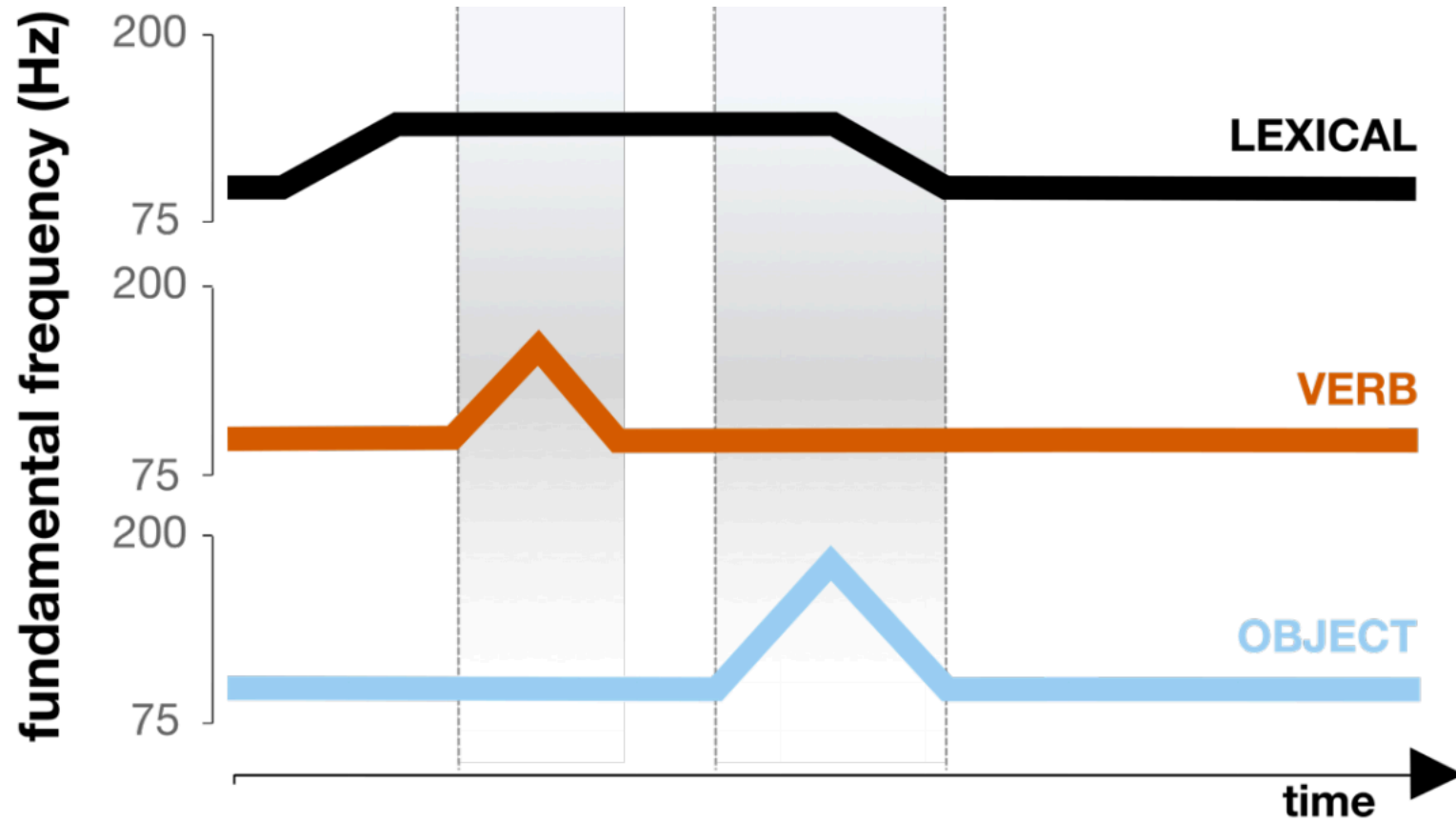
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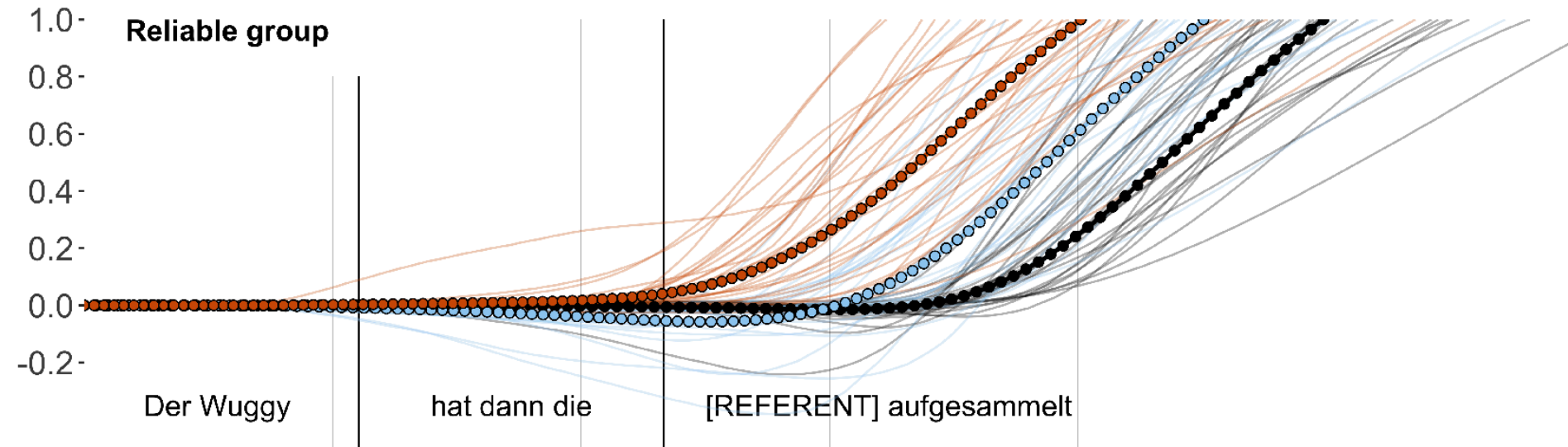
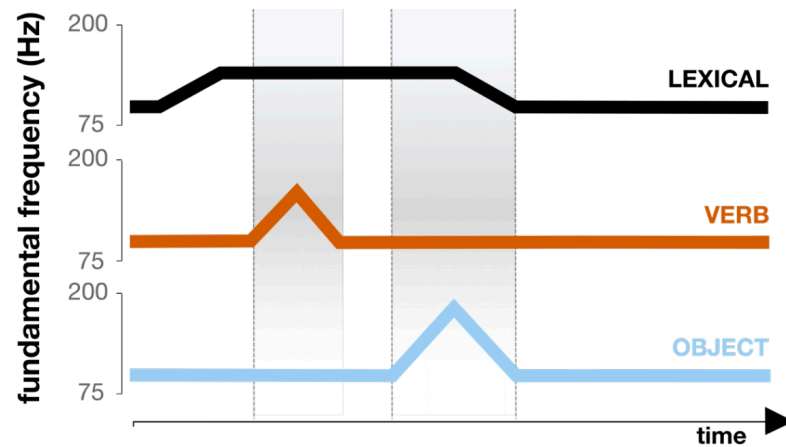
‘The wuggy has picked up the violin.’



no  
expectation







people start looking at the correct object as soon as the prosody is informative

- How do we manage to make all of these complex inferences during conversation?
- Unifying principle: *common ground*

# Common Ground is important for understanding

A: okay, okay, I got it...ele...okay

B: all right, hold on, I got another easy piece

A: I got a well wait I got a green piece RIGHT above that

B: Above this piece?

A: Well not exactly right above it

B: It can't be above it

A: It's to the...it's...it doesn't wanna fit in the cardboard

B: It's to the right, right?

A: Yep

B: Wh-how? Where?

A: It's...kinda line up with the two holes

B: Line 'em up right next to each other?

A: Yeah, vertically

## What's going on?

- Common ground: mutual beliefs and knowledge shared between people
  - World knowledge
  - Prior discourse
  - Shared sensory environment
  - Estimate of interlocuter's belief state

# If I want to flout a Gricean Maxim...

- I have to know the maxims
- I have to know that you know the maxims
- I have to know that you know that I know the maxims
- I have to know that you know that I know that you know the maxims
- ...

# If I want to use the word 'horse' effectively...

- I have to know what a horse is
- I have to know that you know what a horse is
- I have to know that you know that I know what a horse is
- I have to know that you know that I know what a horse is
- ...