

Psychology of Language

14 Pragmatics

Fall 2023

Tues/Thur 5:00-6:15pm

Emma Wing
Drop-in hours:
Wednesdays 3-4pm
& by appointment
[Webex link](#)

Road map

- Assignment #2 is posted, due October 30th @ midnight
 - Reminder: 1 late assignment accepted; 1 redo accepted (/3 total)
- Quiz Reminder: need to complete 8 total to get full points
- Wrap-up and review from **13 Dialogue**
- Unit 2: The Mature System
 - 14 Pragmatics

Dialogue – Wrap-up

- We already looked at...
 - Adjusting assumptions based on a specific other interlocutor
 - Common ground
 - Reliability of the speaker
 - Alignment
- Just a few more concepts left

Audience design

- **Audience design**: adjusting language to communicate more effectively with a listener
- How do you do this in your lives?
 - Think about content, politeness, topic, language, etc.
- What allows us to do it?
 - Knowledge of the audience
 - Feedback from the hearer (both explicit and implicit)
 - Implicit: **back-channel responses**, which are behavioral cues (e.g., nods, murmurs of agreement, body language) that indicate comprehension

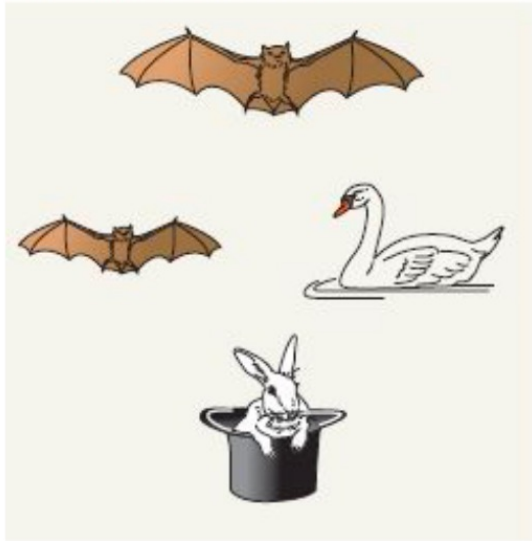
Audience design (adults)

- We've talked a lot about all sorts of ambiguities that crop up in language
- So this might be a good place to test audience design
 - Question: do we adjust our speech to avoid ambiguities to make it easier on the hearer?
- One kind of ambiguity is referential ambiguity
 - When there are two glasses that differ in size, we might say "the tall glass"
 - When there are multiple apples, we might say "the apple on the towel"
- What are some other kinds of ambiguity we talked about?

Audience design (adults)

Yes! ...but not all kinds equally

(A) Non-linguistic ambiguity



(B) Linguistic ambiguity



(C) No ambiguity (control)



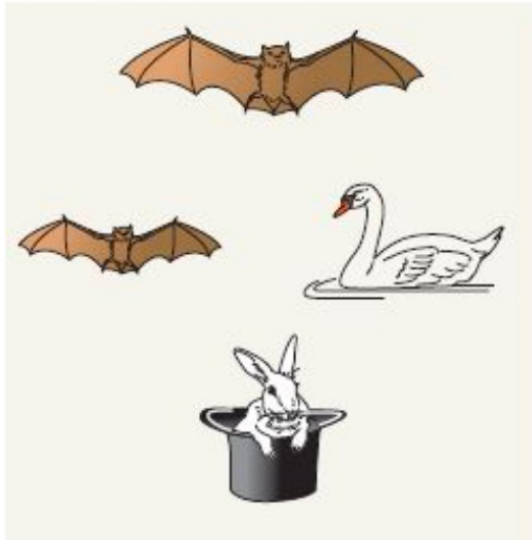
Speakers more often try to avoid non-linguistic (referential) ambiguity than linguistic ambiguity (both lexical and syntactic)

Figure 12.11 Examples of the type of displays used in the study by [Ferreira and colleagues \(2005\)](#). (A) The display contains a potential non-linguistic ambiguity with regard to the word *bat*. (B) There is a potential linguistic (lexical) ambiguity with regard to the word *bat*. (C) This group displays no potential ambiguity. (Adapted from [Ferreira et al., 2005](#), *Cognition* 96, 263.)

Audience design (adults)

Why?

(A) Non-linguistic ambiguity



(B) Linguistic ambiguity



(C) No ambiguity (control)



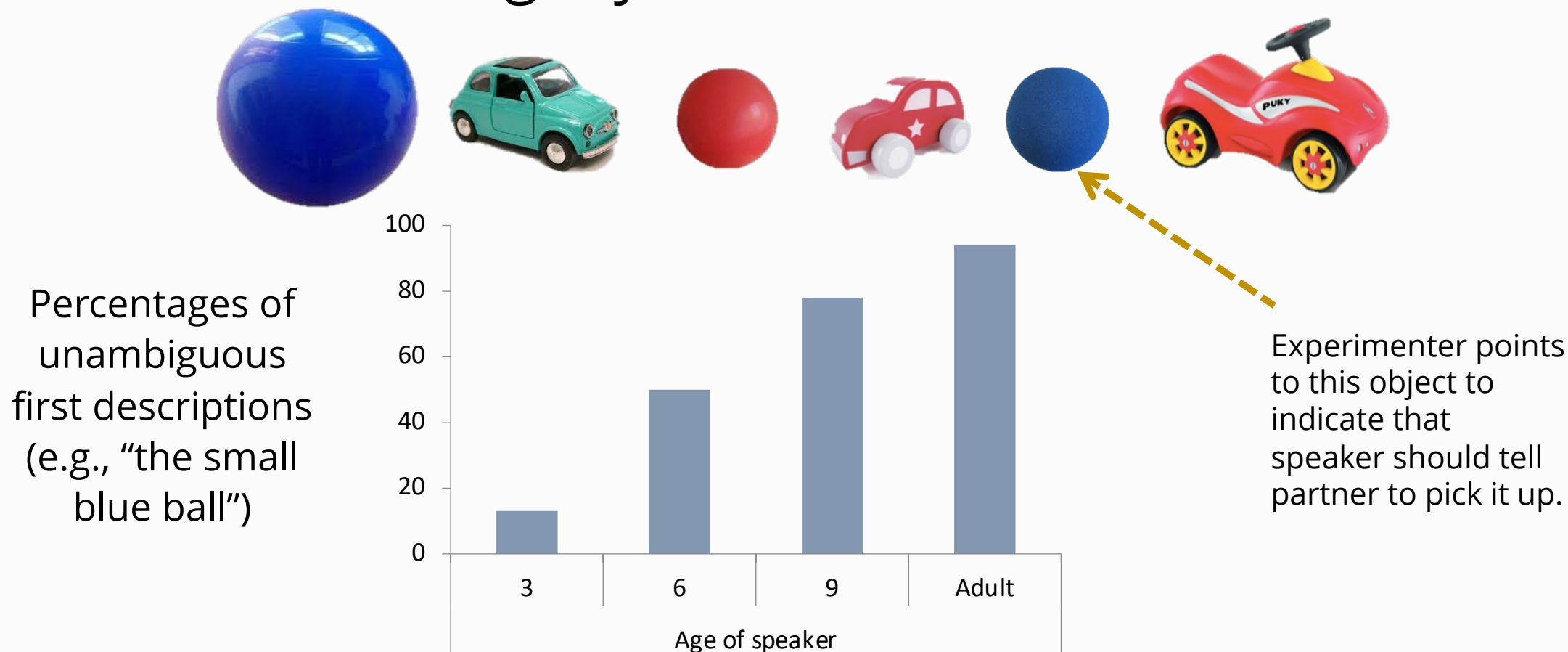
The decision to avoid referential ambiguity can be made at the very start of producing a sentence.

(we'll come back to this next week)

Figure 12.11 Examples of the type of displays used in the study by [Ferreira and colleagues \(2005\)](#). (A) The display contains a potential non-linguistic ambiguity with regard to the word *bat*. (B) There is a potential linguistic (lexical) ambiguity with regard to the word *bat*. (C) This group displays no potential ambiguity. (Adapted from [Ferreira et al., 2005](#), *Cognition* 96, 263.)

Audience design (kids)

Referential ambiguity in kids



Audience design

Let's apply this to a real-world example.

Why are professors so bad at audience design?

- Cognitive load? (e.g., working memory demands)
- Stress?
- Curse of knowledge?
- Most probable: lack of feedback (both implicit and explicit)

Theory of mind

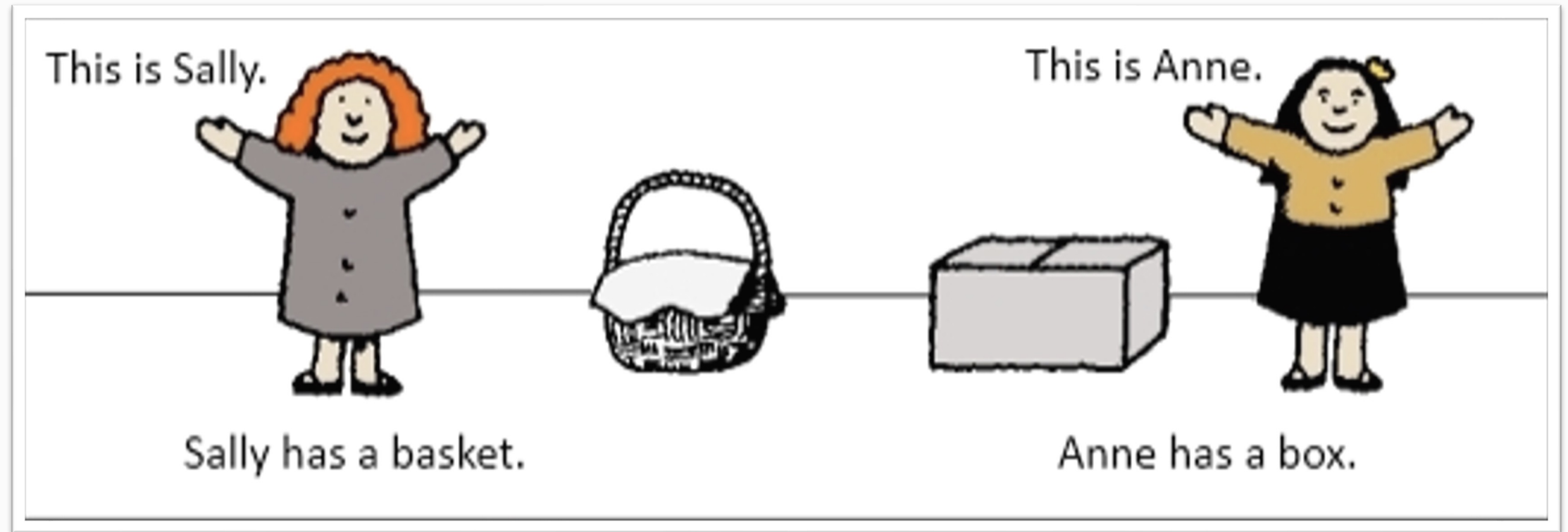
- What allows for taking into account specific interlocutors?
 - **Theory of Mind:** recognition that people have different beliefs, knowledge, and intentions than we do under different conditions
 - A person has a Theory of Mind if they keep track of what's going on in other people's minds, independently of their own.
- We need theory of mind to assess speaker reliability (what does this speaker know? Is it reliable?)
- We need theory of mind to establish common ground
- It helps us to decide whether to align or not
- It helps with audience design to know your partner's knowledge may be different from your own

Theory of mind

- Why do we need Theory of Mind for the following:
 - Assessing speaker reliability
 - Is this speaker's knowledge reliable?
 - Establishing common ground
 - Does this speaker know this information or not?
 - Deciding whether or not to align
 - Do we have the same beliefs and goals?
 - Being good at audience design
 - Is this hearer's knowledge different from my own?
 - Are they comprehending what I'm saying?

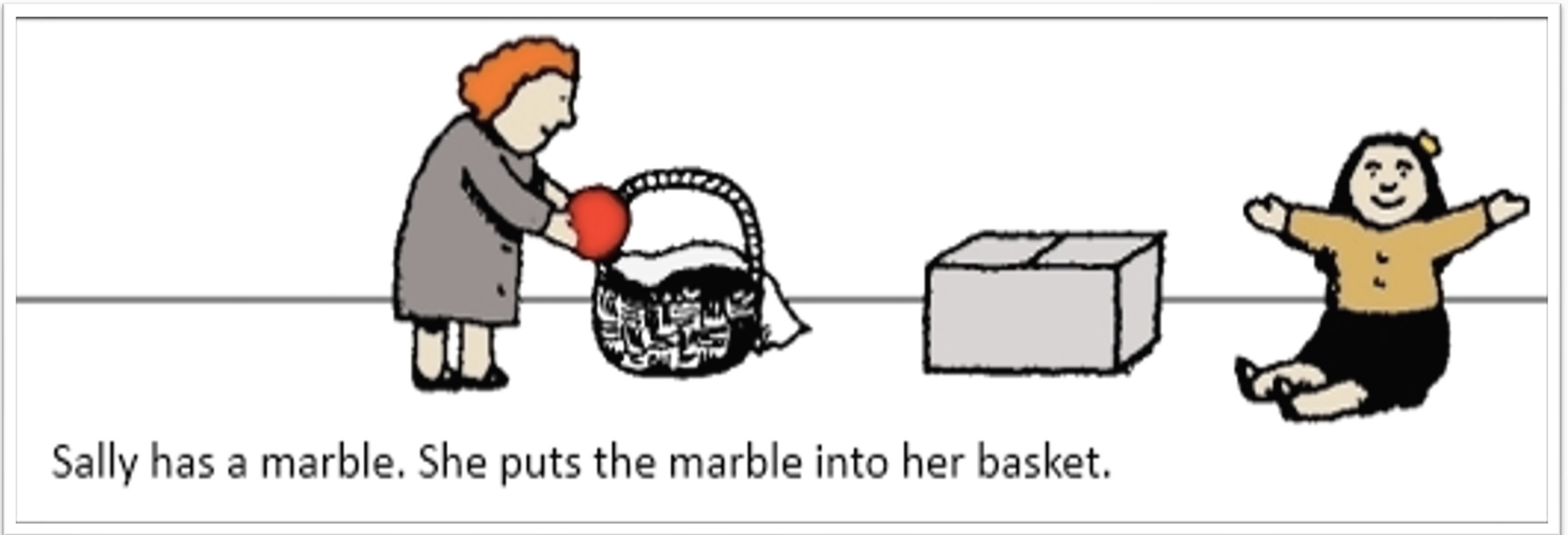
Theory of mind

Experiment: False Belief Task (kids 4 years old and under)



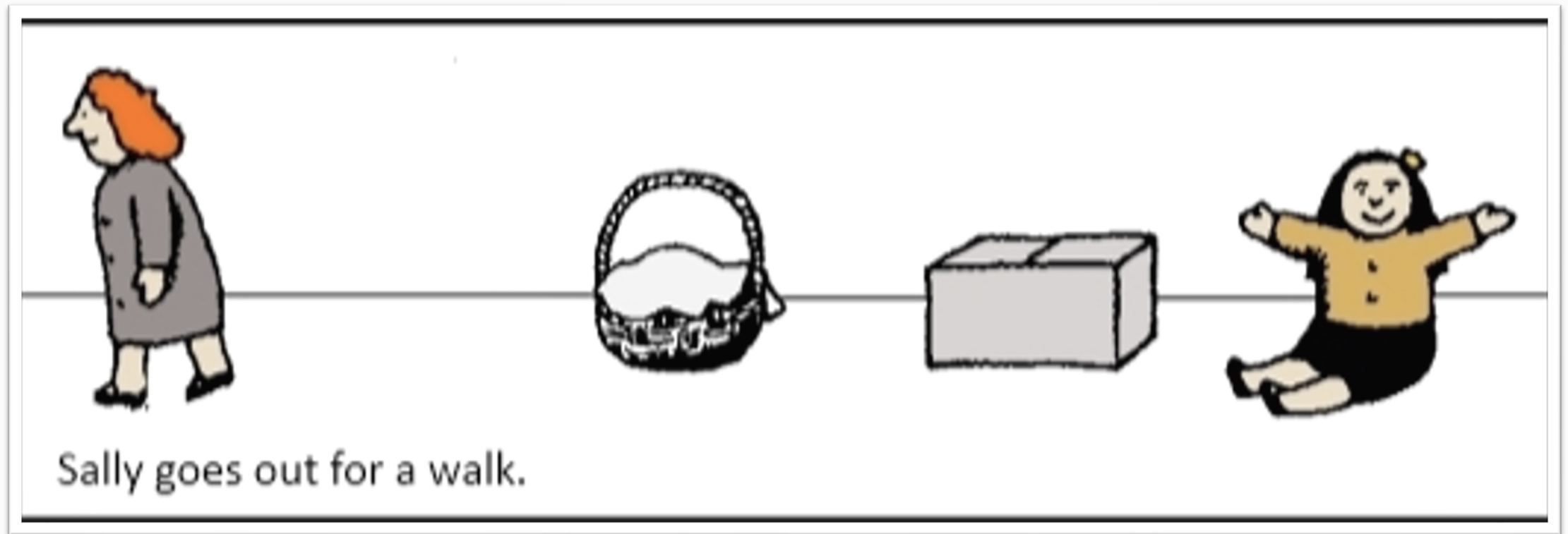
Theory of mind

Experiment: False Belief Task (kids 4 years old and under)



Theory of mind

Experiment: False Belief Task (kids 4 years old and under)



Theory of mind

Experiment: False Belief Task (kids 4 years old and under)



Anne takes the marble out of the basket and puts it into the box.

Theory of mind

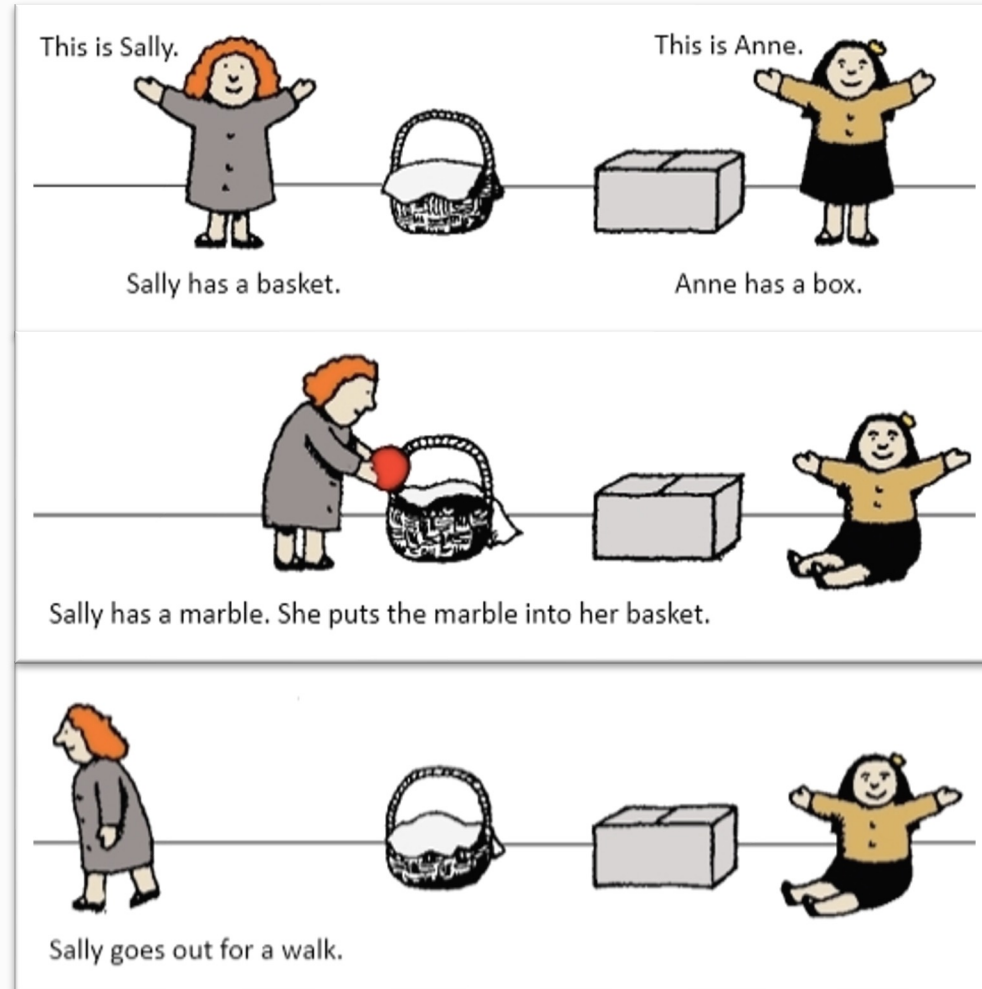
Experiment: False Belief Task (kids 4 years old and under)

Now Sally comes back. She wants to play with her marble.



Where will Sally look for her marble?

Theory of mind



Kids under 4 say, "In the box!"

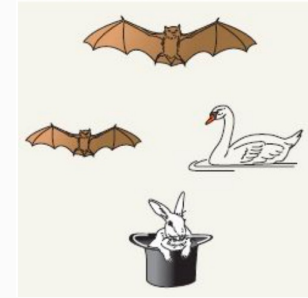
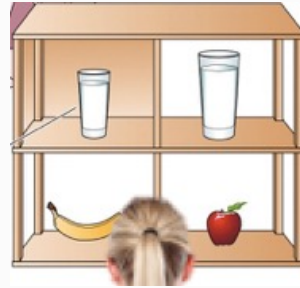
Kids over 4 say, "In the basket!"

Demo: False Belief Task



Demo:
False believe
task

Review



- How do listeners and speakers adjust their assumptions in specific communicative circumstances?
 - Adults & kids adjust their interpretations based on what is in **common ground**
 - Adults & kids adjust their interpretations/learning based on their impression of the **reliability of the speaker**
 - The more you trust or need to cooperate with the speaker, the more likely you are to align to their language choices (words and syntax)
 - Adults are better than kids at adjusting their productions to avoid ambiguity for the listener (i.e, adults are better at practicing **audience design**)
 - ...but some ambiguities (non-linguistic) are avoided more than others
 - **Theory of mind** is needed for establishing common ground, taking into account the reliability of a speaker, and practicing audience design
 - Theory of mind develops gradually over time
 - Linguistic alignment comes from with people

Unit 2:

The Mature system

14 Pragmatics

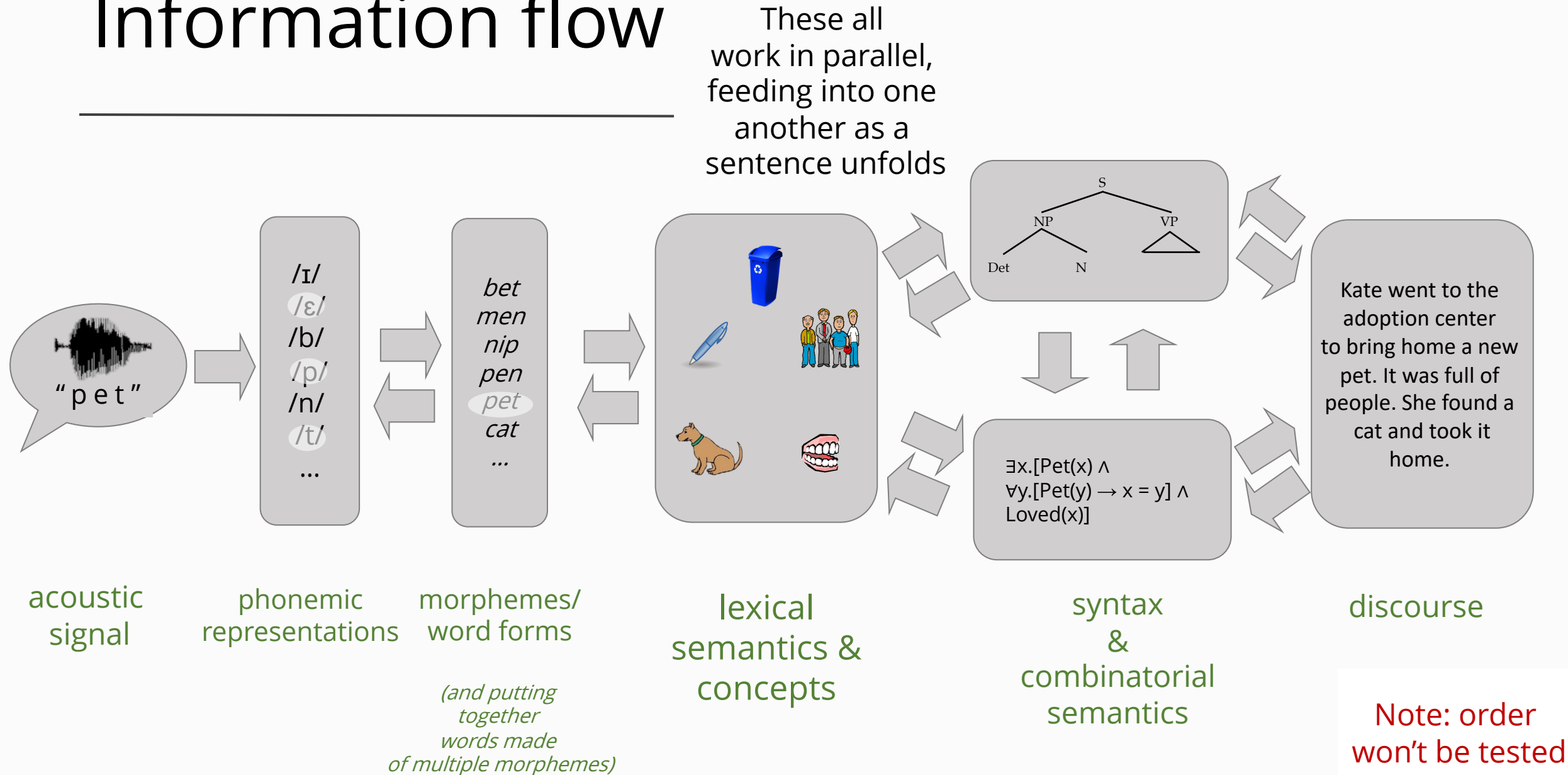
Learning objectives

- Define pragmatics
- Describe what a conversational implicature is and give an example
- Recall Grice's four Conversational Maxims
- Give an example for each Maxim to show how listeners draw inferences based on what the speaker said
- Give an example of someone flouting each of the four Conversational Maxims

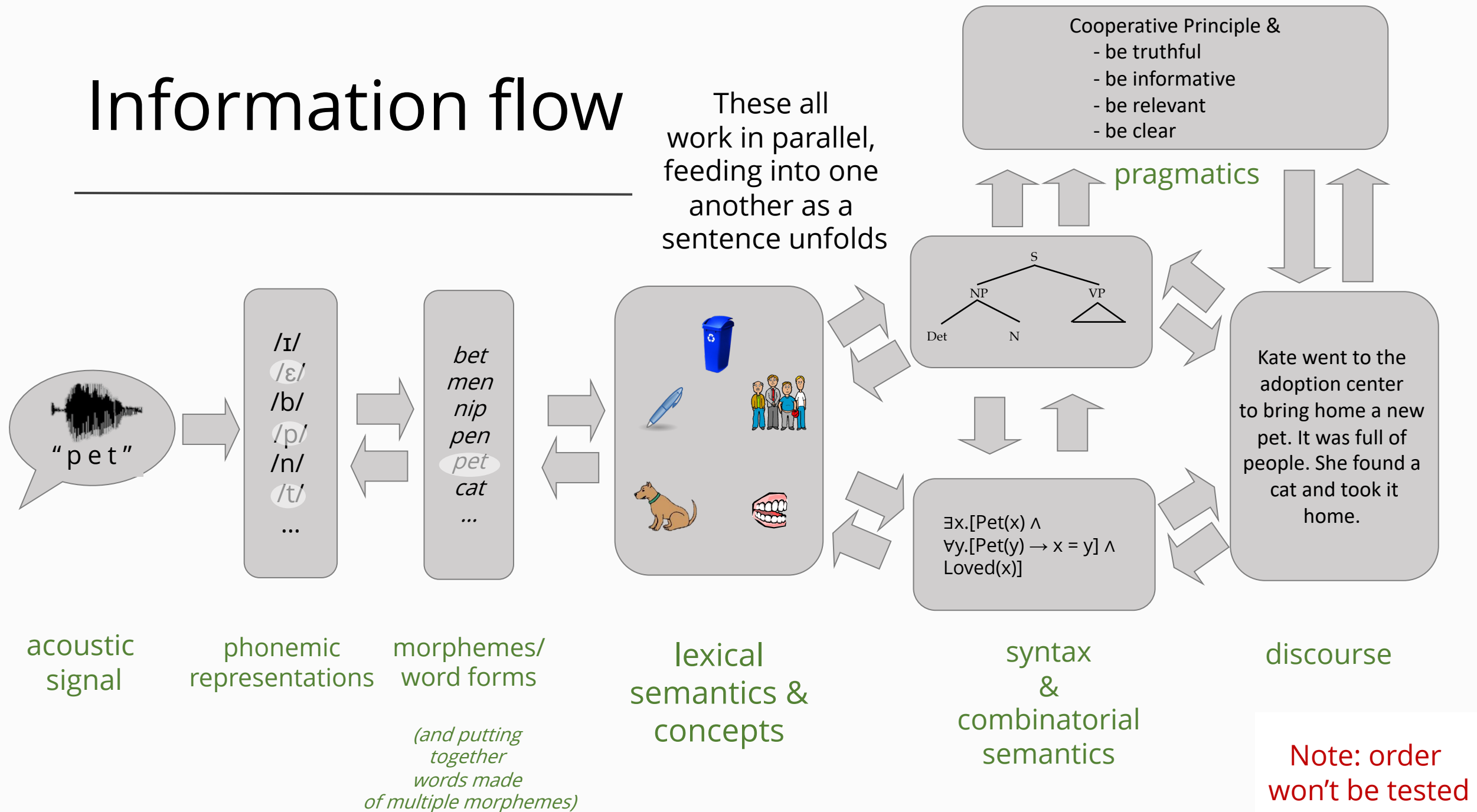
What is pragmatics?

- Pragmatics: meaning beyond literal meaning
 - Talking about one thing in order to express another
1. Can you pass me the salt?
 - Literal: Are you able
 - Nonliteral: Command to pass the salt
 2. Do you know what time it is?
 - Literal: Asking if the listener has this knowledge
 - Nonliteral: Request to give the asker the time
 3. I'd like to move this table away from the whiteboard.
 - Literal: This is a fact about something I would like.
 - Nonliteral: Help me move it.

Information flow



Information flow



Conversational implicature

- Drawing inferences

Speaker A: What languages does Patty know?

Speaker B: She knows English, Spanish, Tagalog, and Quechua.

- What is the inference that is drawn?
 - **Conversational implicature**: something that is not said but comprehenders naturally assume it (based on what *is* said)

Conversational implicature

- More examples. What is the implication?
 1. Can you be quiet?
 2. Colleague: How did that student do in class?
 - Response 1: She got 100% on every assignment.
 - Response 2: Her penmanship was very neat.
 3. Would you like some gum?
 4. It's cold in here.
- What are the bases for these implicatures?

The Cooperative Principle

- Participants in a conversation adhere to the **Cooperative principle**
 - “Contributions to a conversation will be pragmatically felicitous”
 - **Felicitous**: meaning makes sense give the situation
- It is guided by four maxims (coming up in the next slides!)
- All participants expect for others to adhere to this principle

Grice's four maxim's

- Think about these examples. What stands out?

Wikipedia image caption:

Piper Kerr (right), a member of the Scottish National Antarctic Expedition, plays the bagpipes for an indifferent penguin, March 1904



Grice's four maxim's

- Think about these examples. What stands out?

Wikipedia image caption:

Piper Kerr (right), a member of the Scottish National Antarctic Expedition, plays the bagpipes for an indifferent penguin, March 1904

“Right” is unnecessary/extra



Grice's four maxim's

- Think about these examples. What stands out?

Bojack and Wanda are talking about improv.

Bojack: It's a cult. And I know what I'm talking about. I learned a liittle about cults during that year I was a Scientologist! Because, coincidentally, during that year I happened to read a book about cults.

Wanda: Wait, are you saying Scientology is a cult?

Bojack: No, Scientology is not a cult. Improv is a cult. I wanna be very clear. THIS is about IMPROV.



Grice's four maxim's

- Think about these examples. What stands out?

Bojack and Wanda are talking about improv.

Why did he
bring up that
he was a
Scientologist
for a year?

Bojack: It's a cult. And I know what I'm talking about. I learned a liittle about cults during that year I was a Scientologist! Because, coincidentally, during that year I happened to read a book about cults.

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Grice's four maxim's

- Think about these examples. What stands out?

Bojack and Wanda are talking about improv.

Inference: "there must be a connection between Scientology and cults"

Bojack: It's a cult. And I know what I'm talking about. I learned a liittle about cults during that year I was a Scientologist! Because, coincidentally, during that year I happened to read a book about cults.

Wanda: Wait, are you saying Scientology is a cult?

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Grice's four maxim's

- Think about these examples. What stands out?

Speaker A: I hear you went to the opera last night; how was the lead singer?

Speaker B: The singer produced a series of sounds corresponding closely to the score of an aria from 'Rigoletto'.

(Levinson, 1983)

Grice's four maxim's

- Think about these examples. What stands out?

**Saying that the
lead singer was
good would be
a lie.**

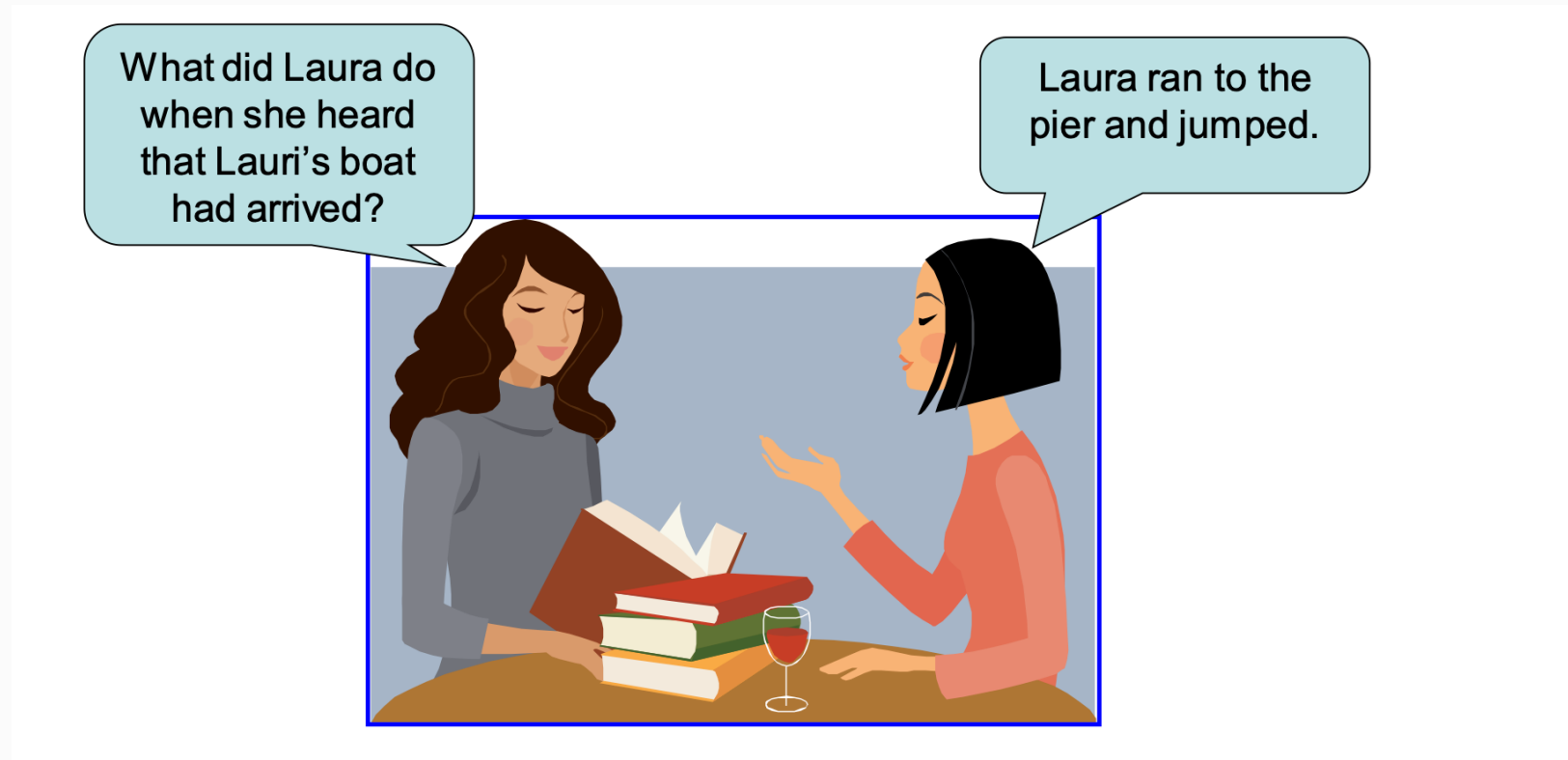
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Grice's four maxim's

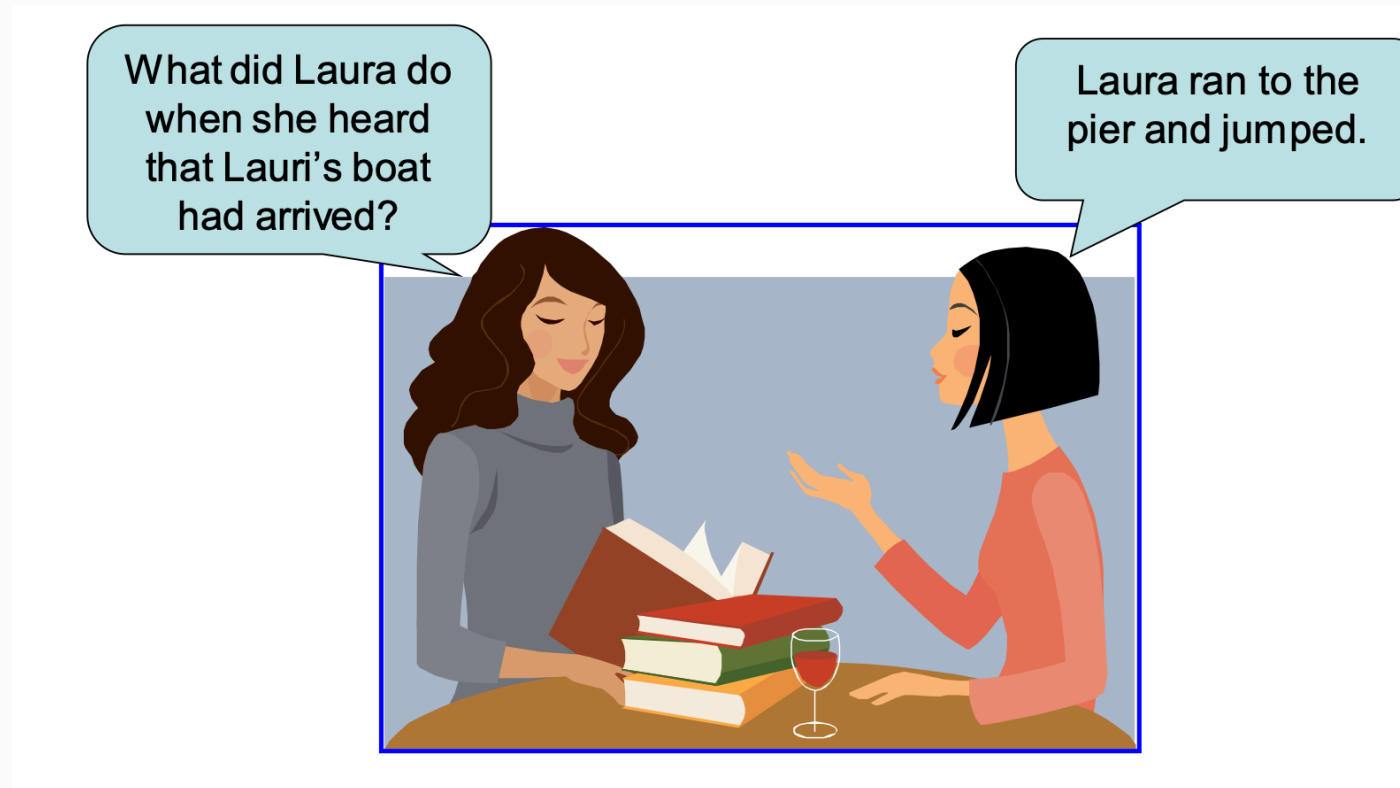
- Think about these examples. What stands out?



Grice's four maxim's

- Think about these examples. What stands out?

**Did Laura jump
off the pier?
The order of
sentences
suggests this!**



Grice's four maxim's

- During cooperative conversation, listeners assume that the speaker is following four conversational maxims
 - **Quality**
 - what the speaker says is true
 - **Relation**
 - what the speaker says is relevant to the conversation
 - **Quantity**
 - the speaker gives as much info as needed, not more (appropriately informative)
 - **Manner**
 - what the speaker says is clear and orderly

Maxim 1:

- The **Maxim of Quality** (Truth)
 - Listeners assume that speakers do not say what they believe to be false.
 - Listeners assume that speakers do not make statements for which they lack any evidence.



Maxim 2:

- The **Maxim of Relation** (relevance)
 - Listeners assume that speakers make each comment relevant in the context of their other comments.



Maxim 3:

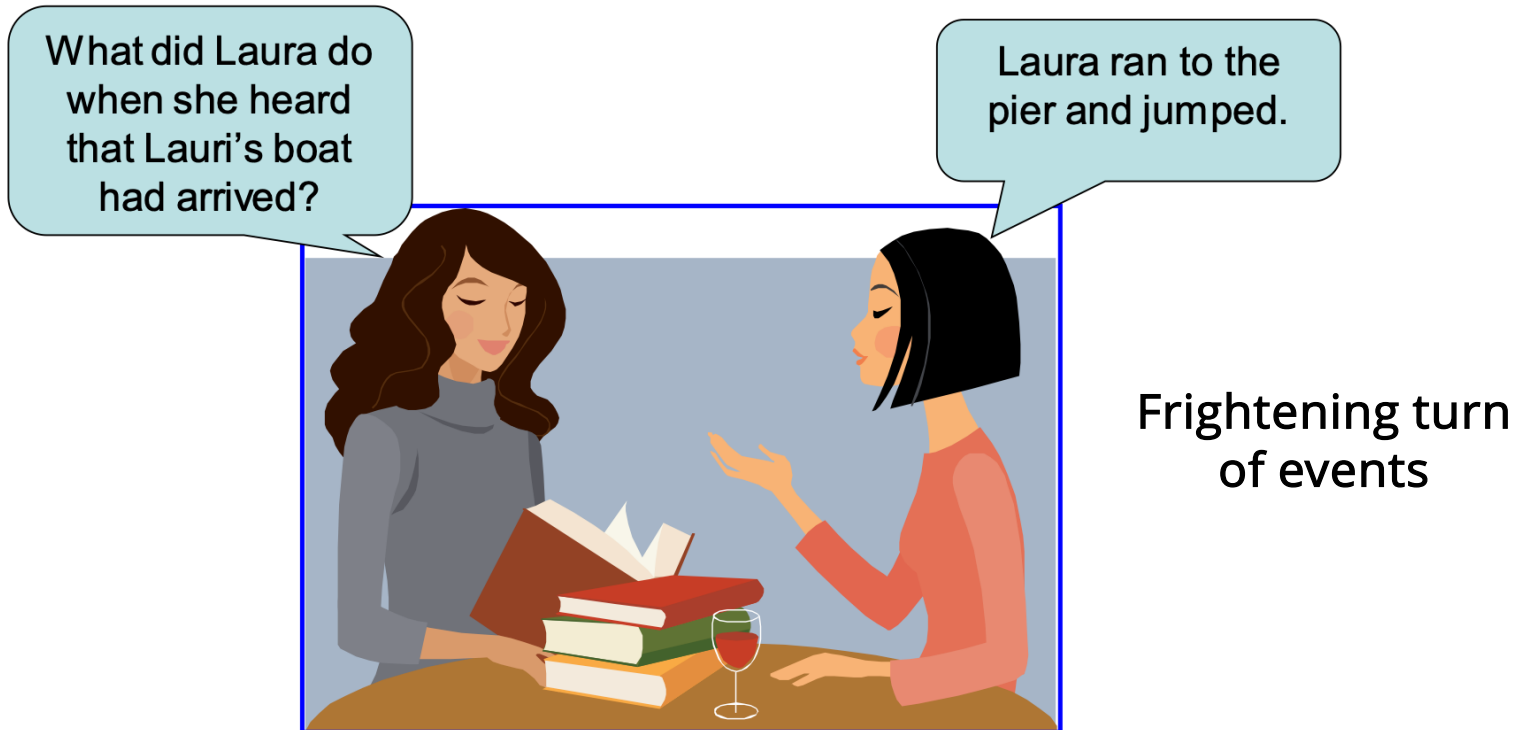
- The **Maxim of Quantity** (informativeness)
 - Listeners assume that speakers provide as much information as is required, not more

Piper Kerr (right), a member of the Scottish National Antarctic Expedition, plays the bagpipes for an indifferent penguin, March 1904



Maxim 4:

- The **Maxim of Manner** (clarity)
 - Listeners assume that speakers avoid obscurity, ambiguity, disorderly communication



Maxim 4:

- The **Maxim of Manner** (clarity)
 - Listeners assume that speakers avoid obscurity, ambiguity, disorderly communication

What did Laura do when she heard that Lauri's boat had arrived?



Laura jumped and ran to the pier.

Order matters!

Just fine.

Violating maxims

- Sometimes people violate maxims
- Violating a maxim happens when someone doesn't follow the maxims and isn't cooperative
 - That is, there is no reason that they did not follow the maxim

Flouting maxims

- Sometimes people flout the maxims
- They do this for a reason: this is when a conversational implicature is drawn
 - For humor or sarcasm
 - To deceive

What maxim is speaker B flouting?

Speaker A: I found a hundred dollar bill on the sidewalk.

Speaker B: Yeah, and I'm the King of England!

Answer: maxim of quality

Flouting maxims

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What maxim is speaker B flouting?

Speaker A: I found a hundred dollar bill on the sidewalk.

Speaker B: Yeah, and I'm the King of England!

It's not true, so the speaker means to say something else, such as "I don't believe you".

Flouting maxims

- If Speaker A assumes that speaker B is cooperating in conversation, then Speaker A has to search for another meaning of what Speaker B said.

Practice

Which maxim is violated or flouted? Why?

Activity on HuskyCT

Practice

Which maxim is violated or flouted? Why?

1. Flouting the Maxim of Quantity



Practice

Which maxim is violated or flouted? Why?

2. **Flouting the Maxim of Quantity**

Speaker A: Where is tomorrow's class?

Speaker B: On campus.

Practice

Which maxim is violated or flouted? Why?

3. Flouting the Maxim of Quality

