

## **Clarification forms**

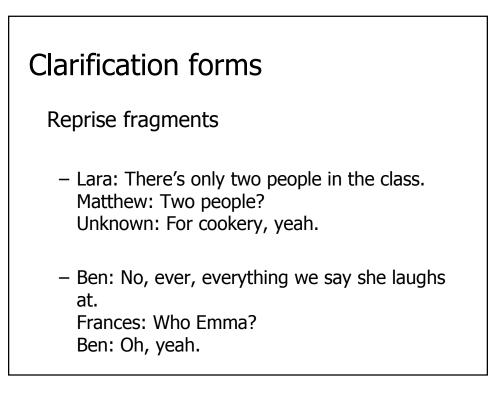
WH-substituted reprise sentences

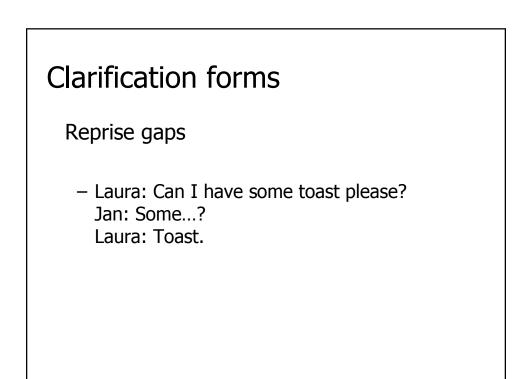
Unknown: He's anal retentive, that's what it is.
 Kath: He's what?
 Unknown: Anal retentive.

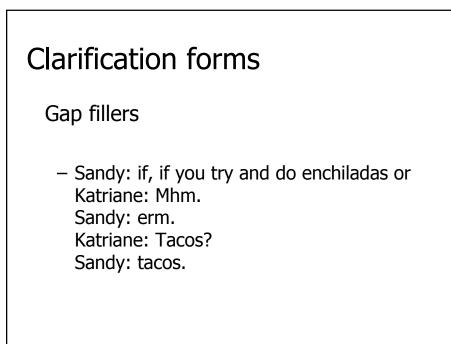
#### **Clarification forms**

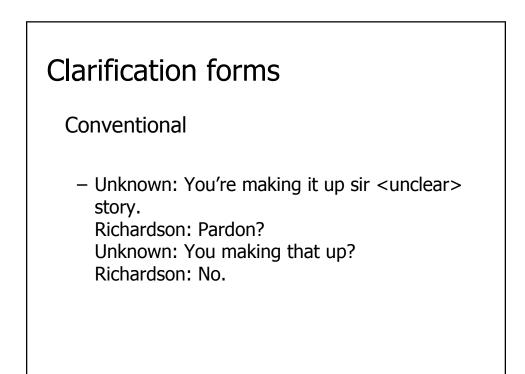
**Reprise sluices** 

Sheila: No he's, he's being moved to troop 15.
 Wendy: To where?
 Sheila: Troop 15.
 Wendy: Oh.





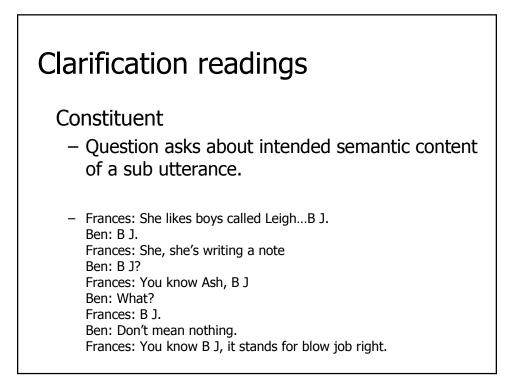




# **Clarification readings**

Clausal

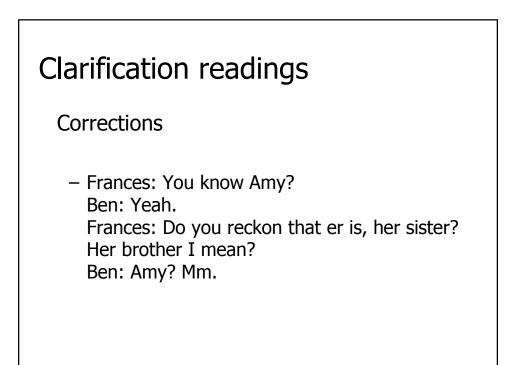
- Source utterance is partially grounded
- Question asks about missing piece of interpretation
- Example:
  - Lara: There's only two people in the class.
    Matthew: Two people?
    Unknown: For cookery, yeah.
  - *is it two people that you are asserting are in the class?*



## **Clarification readings**

Lexical

- Asks what was uttered asks about the surface form rather than the conversational move.
- Anon 6: here that sassafras has been named potentially unsafe for consumption, so don't put any in your mouth Margaret: Saxa-what? Anon 5: Saxa frall that's a plant!



# Typical patterns

Reprise sentence & clausal clarification

- You phoned him?

Reprise sluices & clausal clarification

- To where?

Reprise fragments & clausal clarification

- Two people?

### Typical patterns

Non-reprise form & constituent clarification

– What do you mean?

Conventional form & constituent clarification – What?

Conventional form & lexical clarification

– Pardon?



80% immediately after problem utterance 96% within 4 turns

- Elliptical requests only used close to source

Clarification, if made, is always done right away

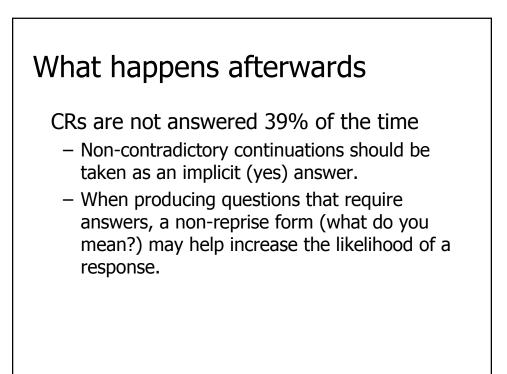
### What needs clarification

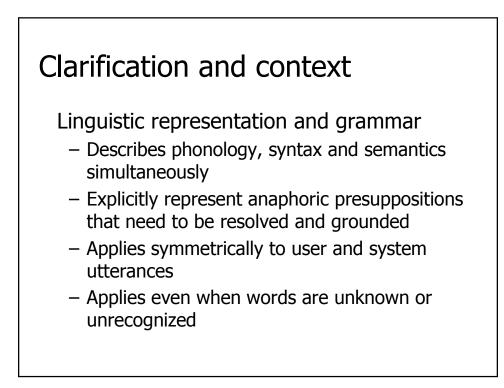
Within a sentence

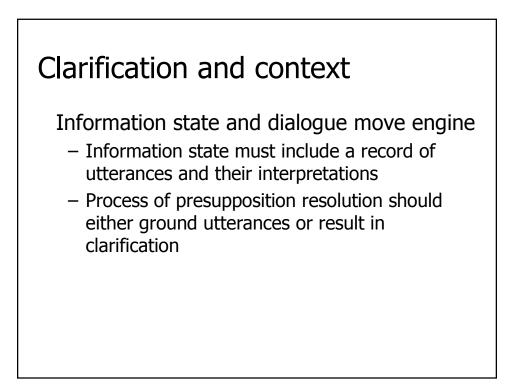
- NPs and such: 94% of clarification
- Verb, Adj, Prep: just 6%

(doesn't follow from type or token frequency)

Or whole sentence









Init

Repeat (integrate orelse coerce orelse accommodate orelse clarify), Manage agenda Manage plan Manage qud

## Dialogue management strategy

Init

- Push the parse output onto the PENDING stack
- Push the parse output onto the UTT stack

## Dialogue management strategy

Integrate

- Resolve the presuppositions directly
- If that works, pop the parse output from PENDING and update the IS as directed
- Series of rules, ordered to maximize relevance

## Dialogue management strategy

Coerce

 Revise the information state and ground that way – handles clarification questions

Accommodate

 Look forward to moves the user might want to make next – handles implicit confirmation and "mixed-initiative" dialogue

Clarify – fall through

