

Presupposition

- Propositions whose truth is taken for granted in the utterance of a linguistic expression
 - It's too bad Nader lost the election.

Existence Presuppositions

- The movie on Cinemax is rated X.
- I've coached Jack's children.

Factive Presuppositions

- Jan knows that Taylor has a 42 inch vertical leap.
- Jan regrets that Taylor has a 42 inch vertical leap.
- Jan forgot that Taylor has a 42 inch vertical leap.
- Jan is glad that Taylor has a 42 inch vertical leap.

Connotative Presuppositions

- Involve words used in particular circumstances
 - Presuppose those circumstances
- Murder
 - Killing intentional
- Assassinate
 - Target has political power



Properties of Presupposition

- · Content is taken for granted
- Still there if you negate the main verb
- He regretted going to the concert the night before the quiz.
- He didn't regret going to the concert the night before the quiz.
- · Can't be denied without contradiction - He regretted going to the concert, but he didn't go to the concert. (huh?)
- · Can be relative to an assumed world - I dreamed the earth was flat, and a lot of people were glad when Columbus fell off the edge.

Presupposition & Memory for **Events**

- Loftus initiated research on realworld memory Began with study of
 - impact of question phrasing
- Loftus & Zanni (1975) - Did you see the
 - broken headlight? Did you see a broken headlight?



Presupposition & Surveys



- Do you get headaches frequently? If so, how often? - 2.2/week
 - Do you get headaches occasionally? If so how often?

- .71/week

What causes these effects?

- · Questions facilitate experimenter demand effects
 - Hear question about "the" headlight and infer that there must have been a headlight, even though you don't remember seeing one
- Question alters participants' memory for events
 - Misleading information gets combined with the original information and results in a different memory for what happened

Loftus & Palmer (1974)

- Showed people movie of a car accident
- · About how fast were the cars going when they
 - hit each other?
 - 8 mph
 - smashed into each
 - other? 10.5 mph





1 week later... Did you see any broken glass? (film contained no broken glass) "smashed" people more likely than "hit" people to say YES! Loftus & Palmer argued that question caused people to reinterpret accident and brought about a permanent transformation of their memory for the acccident





A week later...

- Do you remember seeing a barn?
- · People who received the first version of the question almost always said "no"
- People who received the misleading version of the question much more likely to falsely remember seeing a barn!

Loftus, Miller & Burns (1978)



- Subjects viewed series of 30 slides; answered 20 questions about them
- Did another car pass the red Datsun while it was stopped at the

Stop sign?

- Yield sign?
 Forced choice recognition test Stop Group: 75% correct - Yield Group: 41% correct
- Yield Group: 41% correct
 Lower than chance!
 Exposure to misleading information in questions altered their responses to later questions



Misinformation Effects

- · No hesitation, no lack of confidence
- · No effects when people realize info is false while reading it
 - Was the car that drove past the accident blue? (no subsequent misinformation effects)
- · People who process misinformation carefully can ignore it
 - Tousignant, Hall, and Loftus (1986)
 - Subjects watch an event, read a misleading text about it, then do recognition test
 - Slow, careful readers:
 - · Point out misinformation when it occurs
 - · Not subject to subsequent misinformation effects

What causes misinformation effects?

Loftus

- Substitution Hypothesis - Later information overwrites established information
 - Consequences for memory:
 Difficulty discriminating original event and subsequent information about
 - it • Original trace is overwritten by later information - Controversial because most psychologists believe longterm memories are stored "forever" – not overwritten
- McCloskey/Zaragoza
- Biased Guessing
 Misleading info affects behavior when subjects unable to remember event
- Doesn't affect original memory Lindsay/Johnson
 - Blended Memory
 Misleading info gets combined with original memory (doesn't completely overwrite it)

Logic of Biased Guessing Account

Control Group

- 50% Remember
 Answer correctly
- 50% Forget
 - 25% Guess Right
 - 25% Guess Wrong

Experimental Group

- 50% Remember

 Answer correctly

 50% Forget Original but remember
 - something about the misinformation
 - 20% Guess Right30% Guess Wrong

Loftus, Miller & Burns (1978)
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Predictions

Loftus

- Control subjects should be more accurate than misled subjects because wrench will overwrite the hammer in memory
- Misled subjects more likely to have to guess randomly between the two pictures
- McCloskey & Zaragoza's Biased Guessing account
- Misleading information will have no effect on performance
 This because, misleading info
- works by biasing subjects to choose the picture consistent with the misleading information (and neither picture qualifies)
 In fact, McCloskey & Zaragoza found similar performance in
 - experimental and control groups



Lindsay/Johnson

- Reverse Misinformation Effect
 - Misleading information presented *before* the pictures also leads to misinformation effects
- Substitution Hypothesis predicts memory for pictures will overwrite memory for misleading questions
- RME consistent w/idea that people form a blended memory of pictures and of misleading information presupposed in questions asked of them

Take-Home Messages

- Misleading questions affect memory because both processes – understanding the questions and the encoding and retrieval of information – involves frames and schemas
- Schema-based reconstructive memory also explains why
 - Memory for verbal communication retains the gist of its meaning
 - Memory for pictures retains meaningful interpretation of picture
 - Memory for meaning lasts longer than for physical details

Take-Home Messages

- Schemas large, complex units of knowledge that encode typical properties of instances of general categories
 - Enable us to infer unseen info from what is seen
 - Lead us to 'remember' things we haven't seen

In a nutshell...

- Comprehension an active process of integrating incoming information with knowledge stored in LTM
- Representation of knowledge something we're still working on...
 - Features
 - Propositions
 - Frames, Scripts, Schemas
 - MOPs, TOPs, TAUs
 - ???