

# Presupposition

Chris Potts, Ling 130a/230a: Introduction to semantics and pragmatics, Winter 2024

Feb 27

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## 1 Intuitive definitions

### 1.1 General definition

The presuppositions of an utterance are the pieces of information that the speaker assumes (or acts as if they assume) in order for their utterance to be meaningful in the current context. This broad characterization encompasses everything from general conversational norms to the particulars of how specific linguistic expressions are construed.

### 1.2 Pragmatic presuppositions

Pragmatic presuppositions include the preconditions for linguistic interaction (for example, the mutual public knowledge that we are speaking the same language), the norms of turn-taking in dialogue, and more particularized information about conversational plans and goals. The clearest instances of pragmatic presuppositions are those that cannot easily be traced to specific words or phrases, but rather seem to arise from more general properties of the context and the expectations of the discourse participants.

### 1.3 Semantic presuppositions

Semantic (*conventional, lexical*) presuppositions are part of the encoded meanings of specific words and constructions, called *presupposition triggers*. These will be our focus.

## 2 Presupposition triggers

- (1) The dog is grumpy.
  - a. Presupposes: there is a unique salient dog  $d$
  - b. Asserts:  $d$  is grumpy
- (2) Confirm your eBay transaction. (spam email)
  - a. Presupposes: you have an eBay transaction  $e$
  - b. Requests: that you confirm  $e$
- (3) Sam quit smoking.
  - a. Presupposes: Sam smoked in the past
  - b. Asserts: Sam does not smoke at present
- (4) Ed realizes that it is Wednesday.
  - a. Presupposes: it is Wednesday
  - b. Asserts: Ed is aware that it is Wednesday
- (5) It was Joan who stole the cookies
  - a. Presupposes: someone stole the cookies
  - b. Asserts: Joan stole the cookies
- (6) Why did you murder Prof. Jones?
  - a. Presupposes: you murdered Prof. Jones
  - b. Queries: your reasons for the killing
- (7) JOAN likes spinach too. (focal accent on JOAN)
  - a. Presupposes: some salient entity other than Joan likes spinach
  - b. Asserts: Joan likes spinach

Harder cases to explicate:

- (8) “Are you really looking for a job?” (spam email)
- (9) “You deserve respect and will eventually get it.” (real fortune cookie!)
- (10) “Who wants to go swimming? We do, too” (N. Y. Times headline)
- (11) “I haven’t seen *Evil Dead II* yet.” (*High Fidelity*)
- (12) “There is no God and Dawkins is his prophet.” (review of a Dawkins book)

### 3 Accommodation

Speakers routinely presuppose things that have not already been established as part of the common ground. When they do this, they are implicitly asking the other discourse participants to *accommodate* (Lewis 1979) that information, by adding it to the common ground, or at least by adding to the common ground that the speaker is publicly committed to that information for the purposes of the current interaction.

The ease with which accommodation happens depends on a great many factors. If the speaker is known to be knowledgeable and trustworthy, and the information is straightforward, then accommodation will be easy:

(13) My dog is energetic.

At the other end of the spectrum, surprising information from untrustworthy sources might bring conversation to a halt:

(14) My giraffe ate my homework.

Thomason (1990) describes accommodation as fundamentally:

acting to remove obstacles to the achievement of desires or goals that we attribute to others. (p. 332)

And the act of removing the obstacles might be important:

The case in which a shopkeeper regularly marks off his goods for various ad hoc reasons is different from the case in which the goods have no price at all, even though the cash register receipts may be the same for the two cases. In the one case there is a rule established by a marked price, in the other there is not. (p. 332)

Attempts to force accommodation can serve other discourse goals:

(15) Sign at a hotel pool: We regret that the pool is closed.

Attempts to force accommodation can even involve compromises in terms of the maxim of quality, again to serve other goals:

(16) Politician: I just *know* we're going to win the election.

Speakers can be outright manipulative via accommodation, as in the spam email cases from above:

- (17) a. Confirm your eBay transaction.  
b. Are you really looking for a job?

## 4 Presuppositions in discourse

### 4.1 Backgrounding

In the prototypical case, presuppositions are already agreed upon as true before they are invoked. Accommodation creates many exceptions to this, but it's important that presuppositions always can be backgrounded without too much of a sense of redundancy:

- (18) a. I have a dog, and my dog has brown hair.  
b. It is Wednesday, and Ed realizes {that/that it is Wednesday}.  
c. Ed used to smoke, but he stopped smoking.

Compare with the redundancy of the non-presupposed (but perhaps still peripheral) content expressed by the italicized material in the following:

- (19) Otto Jespersen likes burgers, and Noam Chomsky likes cheese sandwiches. Otto, *#who likes burgers*, usually slathers them in catsup.

### 4.2 Hearer objections

Presuppositions are meanings that the speaker takes for granted and thus assumes to be uncontroversial (or at least acts as if they assume that). Speakers might even go so far as to express certain pieces of information via presupposition triggers in order to signal what is and isn't up for debate. Thus, objecting to presuppositions can be difficult.

Standard denials are generally taken to *accept* presuppositions and target only the asserted content. In (20), for example, the denials (20a–c) all seem to join (20) in presupposing that Sam smoked in the past.

- (20) Sam quit smoking.  
a. No/Wrong/Impossible.  
b. No, he didn't.  
c. I doubt it.

When speakers do want to object to presupposed content, they typically have to resort to more specialized forms that first disrupt the flow of the conversation in order to re-invoke the presupposed content as an item for discussion. Shanon (1976) studies such devices, using 'Hey, wait a minute' and its variants as prototypical examples (see also von Stechow 2004):

- (21) Sam quit smoking.  
a. Hey, wait a minute: I didn't know that Sam smoked!  
b. Just a second: Sam never smoked!

## 5 Presupposition projection

### 5.1 Negation

**Hypothesis N** If  $p$  is a presupposition of sentence  $S$ , then  $p$  is a presupposition of the negated version of  $S$  as well.

- (22) a. Sam stopped smoking. ( $p$  = Sam smoked in the past)  
b. Sam didn't stop smoking.
- (23) a. Ed realizes that it is Wednesday. ( $p$  = it is Wednesday)  
b. Ed doesn't realize that it is Wednesday.
- (24) a. My dog is outside. ( $p$  = the speaker has a dog)  
b. It is not the case that my dog is outside.

### 5.2 Interrogatives

**Hypothesis Q** If  $p$  is a presupposition of sentence  $S$ , then  $p$  is a presupposition of the interrogative version of  $S$  as well.

- (25) a. Sam stopped smoking. ( $p$  = Sam smoked in the past)  
b. Did Sam stop smoking?
- (26) a. Ed realizes that it is Wednesday. ( $p$  = it is Wednesday)  
b. Does Ed realize that it is Wednesday?
- (27) a. My dog is outside. ( $p$  = the speaker has a dog)  
b. Is my dog is outside?

### 5.3 Conditional antecedents

**Hypothesis C** If  $p$  is a presupposition of sentence  $S$ , then  $p$  is a presupposition of any sentence of the form *if S, then S'*.

- (28) a. Sam stopped smoking. ( $p$  = Sam smoked in the past)  
b. If Sam stopped smoking, then his marathon time should improve.
- (29) a. Ed realizes that it is Wednesday. ( $p$  = it is Wednesday)  
b. If Ed realizes it's Wednesday, he'll show up.

## 5.4 Why not turn them around?

The hypotheses above are all of the form ‘If  $p$  is a presupposition, ...’. That is, we need to assume presupposition status and see what follows. Strictly speaking, this means that the tests are useful only for *disconfirming* that  $p$  is a presupposition (via the *contrapositions*, i.e., the equivalent forms like ‘If  $p$  is not a presupposition of the negated version of  $S$ , then  $p$  is not a presupposition of  $S$ ’).

The following is a more powerful version of hypothesis N:

**Hypothesis N’** If  $p$  is expressed in the scope of negation in sentence  $S$  but  $p$  remains a commitment of  $S$ , then  $p$  is a presupposition of  $S$ .

We implicitly use such versions of the tests. However, we shouldn’t follow them blindly, else we will classify certain meanings as presupposed even where that seems wrong. For example:

- (30) a. Sam didn’t see Joan, who works in accounting, when he came in today.  
b. I don’t want any friggin’ broccoli in my dinner!
- (31) If Louise is tall and therefore intelligent, we should put her on our team!

Similar data for: honorifics (Japanese, Korean, and even titles like *Dr*, *Mrs*, and *President*), formal/familiar pronouns (German, French, Spanish), evidentials, and basically all of the stuff that Grice places under the heading of ‘conventional implicature’.

**Lesson** It’s okay to ‘turn the tests around’, as long as it is part of a larger argument in which one looks at a wide spectrum of data.

## 6 Case studies

### 6.1 The definite article

Partee's (1995:317) proposed analysis of the definite article:

- (32)  $\llbracket the\ N \rrbracket =$  the individual  $a$  such that  $a$  is the one and only member of  $\llbracket N \rrbracket$ , if  $\llbracket N \rrbracket$  has one and only one member; undefined otherwise

This is a *partial function*. It is defined for inputs that are singleton sets and undefined for all others:

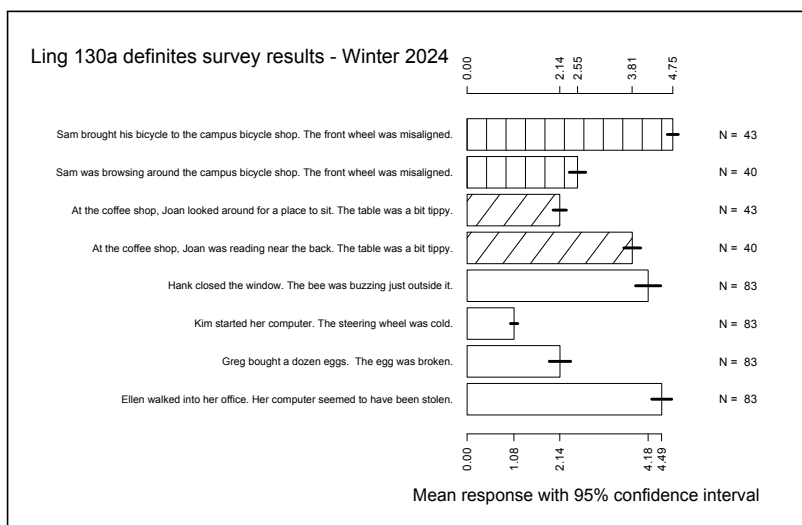
- (33) THE( $X$ )
- 1 if  $|X| \neq 1$
  - 2     **raise presupposition failure and return nothing!**
  - 3 else return any  $x \in X$

Keenan's (1996:43) proposed analysis:

- (34)  $\llbracket the \rrbracket = \lambda X \left( \lambda Y \left( \top \text{ if } |X| = 1 \text{ and } X \subseteq Y, \text{ else } F \right) \right)$

Our in-class experiment on definites challenges both analyses. How?

(35)



My proposed analysis:

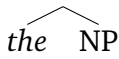
- (36)  $\llbracket the \rrbracket$  is a function from sets to entities:
- a.  $\llbracket the \rrbracket(X)$  is defined if and only if there is a unique **salient** entity  $x$  such that  $x \in X$
  - b. Where defined,  $\llbracket the \rrbracket(X) =$  an entity  $x$  such that  $x \in X$ .

It isn't solely up to linguists to figure out what notion of salience is involved here. Sorting it out would likely be an interdisciplinary project involving linguists, vision researchers, perception researchers, attention researchers, and others.

## 6.2 Deriving hypothesis N

Hypothesis N follows from our decision to model presuppositions as partial functions and our theory of semantic composition:

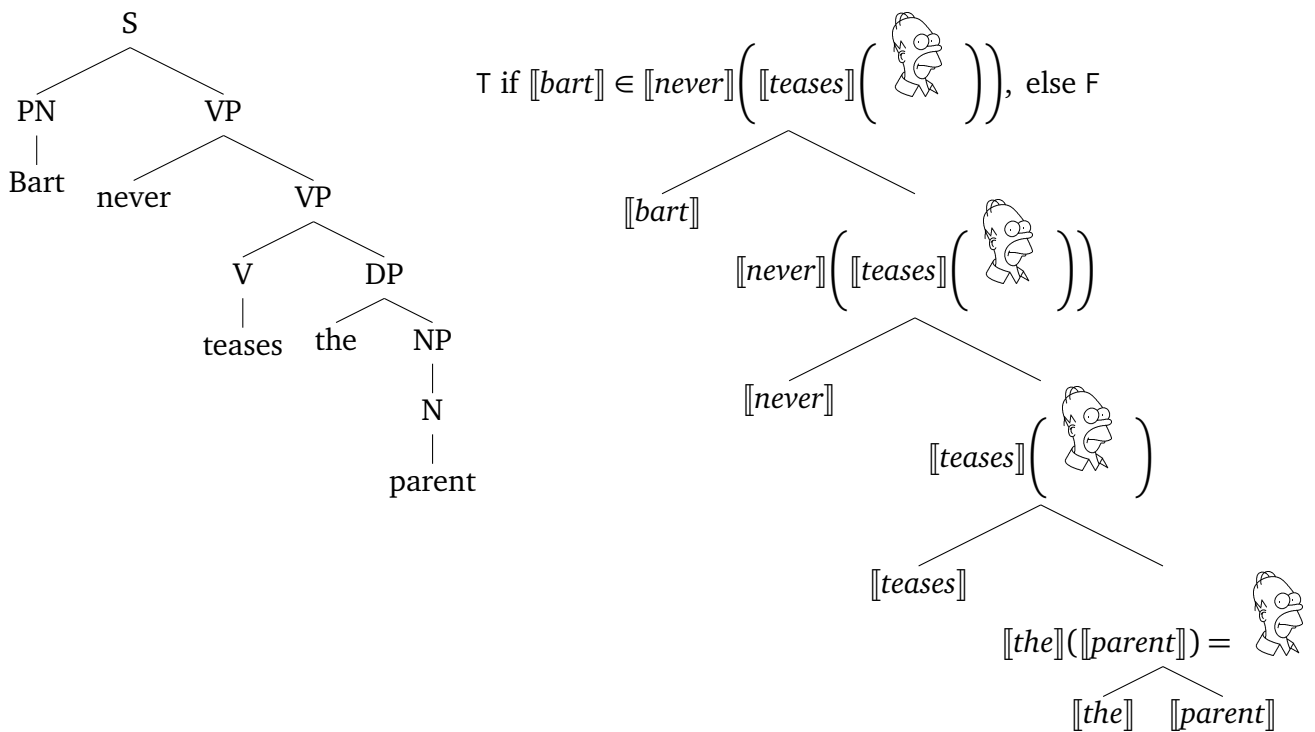
(D) Given a syntactic structure DP,  $[[DP]] = [[the]]([[NP]])$



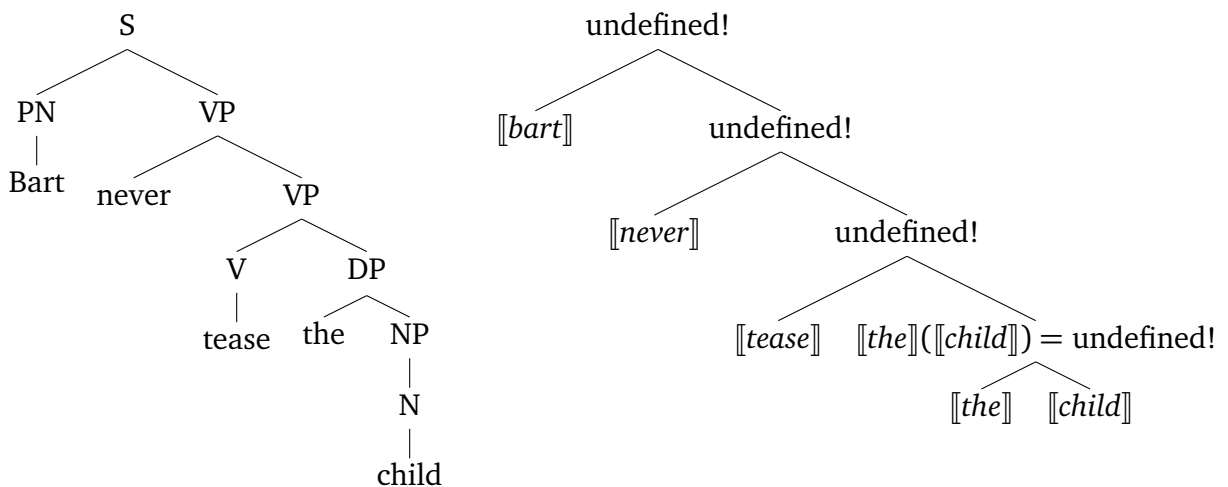
(TVD) Given a syntactic structure VP,  $[[VP]] = [[V]]([[DP]])$



(37)



(38)





### 6.3 Presuppositional quantifiers

(39)  $\llbracket \textit{neither} \rrbracket$  is a quantificational determiner

a.  $\llbracket \textit{neither} \rrbracket(X)$  is defined if and only if  $|X| = 2$

b. Where defined,  $\llbracket \textit{neither} \rrbracket(X) = \lambda Y (\top \text{ if } X \cap Y = \emptyset, \text{ else } \text{F})$  (this is just  $\llbracket \textit{no} \rrbracket(X)$ !)

Compare this with the analysis that Keenan (1996:43) gives, which puts the definedness conditions into the truth conditions:

(40)  $\lambda X \left( \lambda Y \left( \top \text{ if } |X| = 2 \text{ and } X \cap Y = \emptyset, \text{ else } \text{F} \right) \right)$

This makes *neither* claims *false* where there are not exactly two members of the restriction. This conflicts with many intuitions students expressed in Assignment 4, question 1:

(41) “with ‘neither’, we assume it is two people in question”

(42) “In the ‘neither’ case, it is assumed that the speaker is talking about only 2 people”

(43) “(A): Jesse and John felt awkward around their colleagues. Neither of them had seen last night’s football game, so there was nothing to talk about.

“(B): Jesse and John felt awkward around their colleagues. None of them had seen last night’s football game, so there was nothing to talk about.

“Both sentences are well-formed, however sentence A implies that Jesse and John hadn’t seen the football game and the rest of the staff had. Sentence B on the other hand, implies that the entire staff, including Jesse and John, had missed the football game.”

(44) “many English speakers might feel misled if someone said ‘None of my friends came to the party.’ when they were referring to only two friends.”

(45) a. \* “Neither of the five options is enticing.”

b. \* “Of the four choices, neither seemed wise.”

## 7 Framing

### 7.1 Framing is about choices

I want to communicate the proposition  $p$ . Which of the sentences  $S_1, \dots, S_n$  of my language should I utter to express  $p$ ?

- (46) a. Which  $S_i$  will make things easiest for me (for my listener)?  
b. Which  $S_i$  will generate the right pragmatic meanings when its content interacts with the maxims?  
c. Which  $S_i$  will frame the issue from my perspective?

### 7.2 Central tenets of framing (Lakoff 2004)

- (47) a. Every word has a frame.  
b. Negating a frame evokes that frame. (cf. Hypothesis N)  
c. Evoking a frame reenforces that frame.

### 7.3 Examples

- (48) a. We relieved Ed from his chores.  
b. Ed was relieved from his pain.  
c. The pool hustler relieved Sally of her money.  
d. We relieved Ed from his vacation.  
e. hunger relief  
f. tax relief  
g. *relieve*

|                  |          |                     |      |       |
|------------------|----------|---------------------|------|-------|
| $x$              | relieves | $y$                 | from | $z$   |
| ↑                |          | ↑                   |      | ↑     |
| reliever-of-pain |          | blameless afflicted |      | cause |

- (49) “I am not a crook.”  
(50) Democratic party vs. Democrat party  
(51) war on terror/drugs/the environment  
(52) protect the environment  
(53) Some results of the Democratic research firm Fairbank, Maslin, Maullin, & Associates concerning effective language for The Nature Conservancy and The Trust for Public Land to use when trying to get its message of environmental stewardship across to the general public.
- DO stress “preserving” water quality.
  - DO link land conservation to preservation of “working farms and ranches” [...] The word “working” must ALWAYS precede farms and ranches.

- DO evoke protecting wildlife, although the phrase “wildlife habitat” speaks more to the base.
- DO NOT say “open space”. “Open space” is NOT one of the better terms to use in the vocabulary of conservation, and “urban open space” is even worse. In the focus groups, voters perceived “open space” as empty land, not near them, ...
- DO say “natural areas” instead
- DO not just say “trails” – say “hiking, biking and walking trails”. “Trails” can’t be assumed as a phrase that envelopes recreation.

(54) Interview with Frank Luntz (see Luntz 2007) on the Daily Show (April 29, 2005):

SAMANTHA BEE (voiceover): From renaming the estate tax the “death tax” to helping label relaxed emissions standards the “clear skies initiative”, Luntz has made a brilliant career spraying perfume on dog turds. [...] Another vital component: language. [...]

BEE (to Luntz): I’m going to read you some words. Help me warm these up a bit.

LUNTZ: Okay.

BEE: Drilling for oil.

LUNTZ: I would say: “Responsible Exploration for Energy”.

BEE: Logging.

LUNTZ: I would say: “Healthy Forests”

BEE: Manipulation.

LUNTZ: “Explanation and education.”

BEE: Orwellian.

LUNTZ: ...

## 7.4 Taking sides with attitude verbs

(55) The President  $\left\{ \begin{array}{l} \text{says} \\ \text{argues} \\ \text{reports} \\ \text{claims} \end{array} \right\}$  that inflation is under control.

(56) Studies  $\left\{ \begin{array}{l} \text{prove} \\ \text{claim} \\ \text{suggest} \end{array} \right\}$  that drinking coffee makes you smarter.

| Class         | Examples                   | Embedded clause | Stance type  | Speaker attitude | Subject attitude |
|---------------|----------------------------|-----------------|--------------|------------------|------------------|
| Veridical     | <i>show, prove</i>         | At-issue        | Proposition  | +                | +                |
| Antiveridical | <i>disprove</i>            | At-issue        | Proposition  | -                | -                |
| Factive       | <i>know, realize</i>       | Presupposed     | Proposition  | +                | +                |
| Antifactive   | <i>forget</i>              | Presupposed     | Proposition  | +                | -                |
| Non-factive   | <i>think, claim, argue</i> | Neither         | Proposition  | unk              | +                |
| Agreeing      | <i>agree, accept</i>       | Neither         | Interlocutor | +                | +                |
| Concessive    | <i>admit, concede</i>      | Neither         | Interlocutor | +                | +                |
| Disagree      | <i>deny, reject</i>        | Neither         | Interlocutor | unk              | -                |

- A predicate is *aligned* if the speaker and subject attitudes are the same. In a study of the ChangeMyView Subreddit corpus,<sup>1</sup> Luo et al. (2023) find that usage of aligned predicates correlates with successfully changing people’s minds.<sup>2</sup>
- Luo et al. (2023) also show that factive predicates correlate with successfully changing people’s minds. However, citing one’s own research using factive predicates can have the reverse effect, and personal beliefs and attitudes are better reported with non-factives.
- Verbs with ‘unk’ for the speaker attitude may tend to convey that the speaker is biased against the embedded clause. This is a conversational implicature deriving from competition with verbs that are ‘+’ for the speaker attitude.
- The consistency of the above implicature may explain why there are not any ‘-/+’ verbs, that is, cases where the speaker is committed to the negation of the embedded clause but the subject is committed to the embedded clause. For example, *claim* can almost always convey this even though it is consistent with the speaker being agnostic.<sup>3</sup>
- These predicates are potentially vehicles for subtle media bias via what they convey about the Speaker attitude.

<sup>1</sup>From Tan et al. 2016 and available at <https://convokit.cornell.edu/documentation/winning.html>.

<sup>2</sup>Data and code: <https://github.com/yiweiluo/persuasion>

<sup>3</sup>The meaning itself is conveyed by *mistakenly believe*. The closest lexical contender for this category is *misconceive*, but I think it doesn’t take *that*-clause complements. Glass (2023) argues that the Mandarin verb *yǐwéi* falls in this class.

## 7.5 The verb *know* as a framing device

Does *know* have a factive presupposition? The data are complex!

- (57) Sam didn't know/believe it was Wednesday.
- (58) Does Sam know/believe it is Wednesday?
- (59) "That woman who knew I had dyslexia—I never interviewed her.' —New York Times, September 16, 2000 [George W. Bush speaking of Gail Sheely] [...] Overlooked in all the merriment was the statement's inadvertent confirmation of the Sheely thesis: "That woman who knew I had dyslexia" makes clear that the reporter got it right—otherwise, Bush would have used 'said' or "claimed'." —Mark Crispin Miller. 2001. *The Bush Dyslexicon*, p. 102.
- (60) "But I guess when you know something terribly important that the entire world thinks is hoey, it gets harder and harder to let it go." [The author is the target of a conspiracy theory, and this is a description of the conspiracy theorist's mental state.]

Confessions of a Non-Serial Killer. Conspiracy theories are all fun and games until you become the subject of one. By Michael O'Hare. <http://www.washingtonmonthly.com/features/2009/0905.ohare.html>

- (61) "For the first time in history, the U.S. has gone to war with an Arab and Muslim nation, and we know a peaceful solution was in reach." —From a 1991 Wall Street Journal article "U.S. Hails Invasion Of Kuwait and Iraq As 'Dramatic Success'"
- (62) "Let me tell you something, when it comes to finishing the fight, Rocky and I have a lot in common. I never quit, I never give up, and I know that we're going to make it together." —Hillary Clinton, April 1, 2008.
- (63) Solan & Tiersma, p. 67-68: "The suspect was being questioned about a mass murder case that took place at a Phoenix temple."

Interrogator: Now Victor, ah Leo, you know that that's right. I mean you're shakin' your head trying to convince yourself, you know, but you cannot erase what happened. You cannot erase what happened. You were there.

Suspect: No I wasn't.

Interrogator: You went there (unintelligible).

Suspect: I was not there!

Interrogator: You know who you were with.

Suspect: No I don't.

Interrogator: You know who the people were that were there and you know what you know about what happened.

Suspect: I don't know anything.

Interrogator: Sooner or later, you know, you've got to say it.

Suspect: I, I wasn't there, I was not there.

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