1 One account: The Gricean principle of cooperativeness

“[Interactions] are characteristically, to some degree at least, cooperative efforts; and each participant recognizes in them, to some extent, a common purpose or set of purposes .... at each stage, SOME possible conversational moves would be excluded as conversationally unsuitable. We might then formulate a rough general principle which participants will be expected (ceteris paribus) to observe, namely: Make your conversational contribution such as is required, at the stage at which it occurs, by the accepted purpose or direction of the talk exchange in which you are engaged” (Grice, 1975, pg. 45)

People draw inferences (conversational implicatures) via certain heuristics. (See Grice paper.)

2 Non-cooperativeness: failure to recognize intent

Recall the “does your dog bite?” example.

3 Evidence for discourse segments and their (in)accessibility.

Example 1. Example adapted from Sidner [1979].

1(a) 1. Will is a nice guy, but a little clueless.
2. Like, the other day, he bought a book of crosswords for me,
3. but he mailed it book-rate,
4. so it took forever to arrive.
5. Oh, remind me to show you the last puzzle in it sometime—
6. it has these two really fiendish clues you would love.
7. Anyway, it took almost three weeks before I finally got it.
8. \[\text{(e)}\]

1(b) 1. Will is a nice guy, but a little clueless.
2. Like, the other day, he bought a book of crosswords for me,
3. but he mailed it book-rate,
4. so it took forever to arrive.
5. Oh, remind me to show you the last puzzle in it sometime—
6. it has these two really fiendish clues you would love.
7. It took almost three weeks before I finally got it.
8. Anyway, they combine to form an anagram of the final answer.
9. \[\text{(d)}\]

1(c) 1. Will is a nice guy, but a little clueless.
2. Like, the other day, he bought a book of crosswords for me,
3. but he mailed it book-rate,
4. so it took forever to arrive.
5. Oh, remind me to show you the last puzzle in it sometime—
6. it has these two really fiendish clues you would love.
7. Anyway, it took almost three weeks before I finally got it.
8. They combine to form an anagram of the final answer.
9. \[\text{(c)}\]

1(d) 1. Will is a nice guy, but a little clueless.
2. Like, the other day, he bought a book of crosswords for me,
3. but he mailed it book-rate,
4. so it took forever to arrive.
5. Oh, remind me to show you the last puzzle in it sometime—
6. it has these two really fiendish clues you would love.
7. Anyway, it took almost three weeks before I finally got it.
8. Anyway, they combine to form an anagram of the final answer.
9. \[\text{(d)}\]
4 Attention has its own structure


John drank the wine on the table. It was brown and round.

Example 3. Example appears in Grosz and Sidner (1986) credited to Polanyi and Scha “forthcoming”, although the published versions of Polanyi and Scha that I was able to find give a similar but longer discourse.

3(a) John came by and left the groceries.
3(b) Stop that you kids.
3(c) And I put them away after he left.

5 Discourse segment purposes (DSPs)

The intention whose recognition is what motivates the discourse segment.

Example 4. Example from Grishman [1986, pg. 157].

A1: Do you know when the train to Boston leaves?
B1: Yes.
A2: I want to know when the train to Boston leaves.
B2: I understand.

References


Graeme Hirst. Anaphora in Natural Language Understanding. Lecture notes in computer science 119. Berlin: Springer-Verlag, 1981. URL http://www.springerlink.com/content/82712u28641/?p=bac5b25f109644bad53ec7ce3b2e0eb&amp;pi=-.
