

1 Alternative to the theory we've been building up to: Rhetorical Structure Theory

Closed set of (typically) directed relations between “basic” items. There are a number of RST parsers available.

2 From last time: Phenomena we need to account for

Example 1. Referents become inaccessible. Cue phrases.

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.

Example 2. (from last time) Importance of intention recognition: “Do you know when the train to Boston leaves?”
“Yes.” / “Does your dog bite?”

Example 3. Interruptions are natural (but should not account for every utterance): “Stop that you kids!”

3 Main elements of the Grosz and Sidner theory

1. *Discourse segment purposes (DSPs)*: the intention whose recognition is what motivates the segment.
 - So segments arise from intentions, not the other way around.
 - The DSP need not be the overt intention, nor the true intention.
 - The (only) relations between DSPs are *domination* and *satisfaction precedence*
2. The *attentional stack of focus spaces*. A new space, containing segment-salient referents plus the DSP, is pushed onto the stack when a new DSP is introduced. The focus space atop the stack is popped off when the DSP is recognized/realized.

Example 4.

1 MR. ASHLEY: Welcome to the ACM chess challenge. I'm Maurice Ashley. My
2 partner is Yasser Seirwan. Garry Kasparov is playing against IBM's
3 Deep Blue, and as most everybody here knows, he is down 1 nothing
4 already. So Kasparov needing to play well in order to come back. A big
5 question for him is whether or not he can handle the psychological
6 pressure of being down against the computer that, first of all,
7 everybody thought he was going to beat, including himself and, second
8 of all, he simply has no idea how strong it is because this version
9 that they're using has never been tested and is clearly playing some
10 excellent chess.

11 Yasser, yesterday's game was a model of computer cold-bloodedness.

12 MR. SEIRAWAN: Precision.

13 MR. ASHLEY: It just did not care about Kasparov's attack and just
14 ripped him off the board. It was unbelievable.

15 MR. SEIRAWAN: It's terrible. I'm still recovering.

16 (Laughter.)

17 MR. SEIRAWAN: Actually, prior to the match I had said, okay, it's
18 great. This is wonderful. There's a lot of hype, the best computer
19 the world versus the best human player in the world. Well, it's no
20 contest. Garry is going to just win. And I would be shocked, shocked
21 if the computer won any game. So naturally --

22 MR. ASHLEY: So you're in shock.

23 MR. SEIRAWAN: I'm in shock.

24 So naturally Deep Blue won the first, and just as you were saying,
25 Maurice, I can't fault any single move that the computer made.

26 We had dinner last night together with a group of ourselves, and we
27 just kept going through the game at various stages, and we said, this
28 is a very, very serious opponent for Garry. This is a very legitimate
29 match, and of course now that Garry is down a point, he's got to prove
30 himself. Yesterday I had spoken about the fact that in tennis -- and
31 again I'm probably misattributing the quote. It was of Rod Laver, when
32 he was going to sum up his opposition, he said, I only need to see 3
33 shots. I need to see the forehand, backhand and the serve, and then I
34 will tell you how long or how many sets the match is going to last
35 before I win.

36 And Garry said the same thing on Friday at the press conference. He
37 said basically I need to see the computer on offense, on defense, and
38 then the match is going to be mine. So he basically saw the first 2
39 games as just being his ability to sum up his opponent and then
40 vanquish him in the latter half of the match.

41 Well, that may still work, but he's got his work cut out for him. He's
42 made it more difficult for himself.

43 MR. ASHLEY: What about the psychological pressure on him? From what
44 I've seen, I've seen Kasparov down in matches before. He was down
45 against Anand in game 9. He was down against Kramnik in the Paris leg
46 of the Gran Prix tournament and came back and won. In each case
47 Kasparov seems to bounce back from matches. He is not just the kind of
48 guy who goes down in chess games and falls apart.