

Searching the CCGbank with Tregex

Answer Sheet

Corpus-Based Computational Linguistics
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2008 Linguistics Summer Mini-Institute

1. Queries:

- subject relative pronoun: "(NP\NP)/(S[dc1]\NP)" < __
- object relative pronoun: "(NP\NP)/(S[dc1]/NP)" < __
- free object relative *what*: "NP/(S[dc1]/NP)" < __
- *tough*-adjective: "(S[adj]\NP)/((S[to]\NP)/NP)" < __

Matches (no. sentences):

- subject relative pronoun: 241
- object relative pronoun: 22
- free object relative *what*: 16
- *tough*-adjective: 2

2. Query: "NP\NP" < "S[dc1]/NP". This turns up 76 matching sentences, or roughly 3 times as many as with object relative pronouns.

3. Queries:

- subject relative *that*, correct: "(NP\NP)/(S[dc1]\NP)" < (WDT < that)
- subject relative *that*, wrong: "(NP\NP)/(S[dc1]\NP)" < (IN < that)
- object relative *that*, correct: "(NP\NP)/(S[dc1]/NP)" < (WDT < that)
- object relative *that*, wrong: "(NP\NP)/(S[dc1]/NP)" < (IN < that)

Matches (no. sentences):

- subject relative *that*, correct: 98
- subject relative *that*, wrong: 1
- object relative *that*, correct: 1
- object relative *that*, wrong: 14!

4. Queries:

- "S[dc1]\NP.*[ARG0]" < /VB/
- "S[dc1]\NP.*[ARG1]" < /VB/
- "S[dc1]\NP.*[ARG2]" < /VB/
- "S[dc1]\NP.*[ARG3]" < /VB/

Matches (no. sentences):

- ARG0: 1028
- ARG1: 277
- ARG2: 26
- ARG3: 1

5. Queries:

- "(NP\NP)/(S[dc1]/NP).*ARG1" < __
- "(NP\NP)/(S[dc1]/NP).*ARG0" < __
- "(NP\NP)/(S[dc1]/NP).*ARG2" < __

Matches (no. sentences):

- ARG1: 19
- ARG0: 1 – here *whom* is both the (ARG1) object of *nominate* and the (ARG0) controller of the subject of *serve*
- ARG2: 1 – here the relative pronoun (correctly) fills the ARG2 role of *reward*, which is what someone is rewarded for; see <http://verbs.colorado.edu/framesets/reward-v.html>