Adjacency and Locality

A Constraint-Based Analysis of Complementizer-Adjacent Extraction

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Phenomenon & Problems

❖ Complementizer-Adjacent Nominal Extraction (a.k.a. 'That-Trace Effect'): (1) vs. (2)

❖ Problems:
1. Adverb Effect: (3), (4)
2. Relative Clause Paradox: (5), (6), (7)
3. Embedded VP Topics: (8), (9)
4. Embedded Auxiliary Inversion: (10), (11)

Proposal

❖ Use two components of LFG's Correspondence Architecture that have received little attention:

1. Syntactically unparsed input string to c-structure (Phonologically parsed/tokenized into words)

2. String to c-structure correspondence function: π

❖ **Key**: Relevant grammatical notion for CANE is linear adjacency, not structural superiority

- Adjacency of complementizer and subject (not C and head — contra L&H 2006; cf. (8))

❖ New metavariable, $\succ$: The next word's f-structure

F-Precedence is Inadequate

❖ On the normal assumption that C is a co-head, f-prec. is inadequate (on either formulation), because the relevant material can be missing (5) or mingled (8–9) & (10–11).

Correspondence Architecture

❖ Parallel modules related by correspondence functions

FORM — π → • — ϕ → • $\cdots$ → • MEANING
string   c-structure   f-structure
Relevant part of architecture
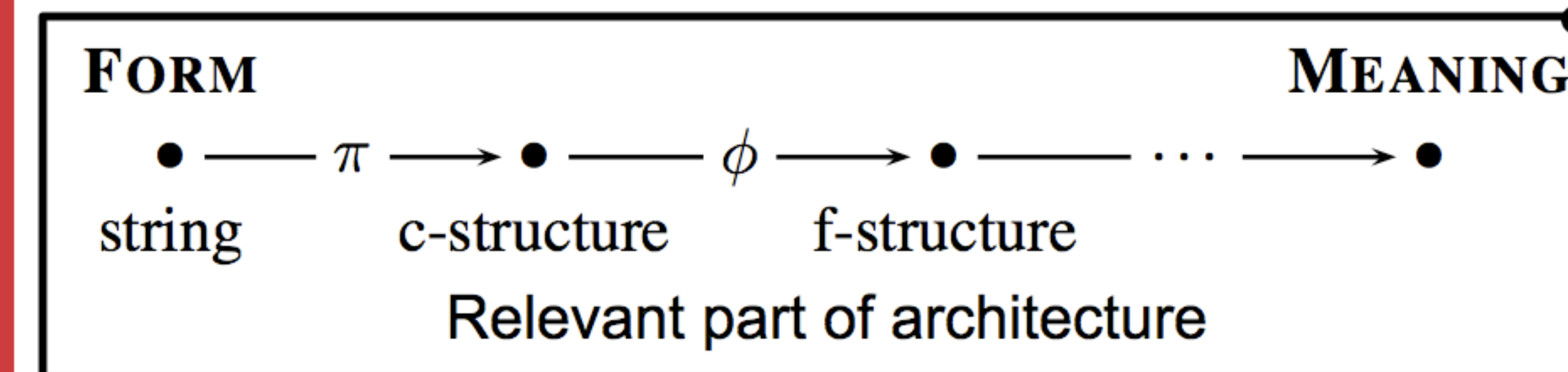
Example Sentences

(1) Who do you think sneezed?

(2) * Who do you think that sneezed?

(3) Who did you say that, just a minute ago, sneezed?

(4) Who does Robin think that, with Mary out of the picture, might receive the nomination?

(5) This is the person that sneezed.

(6) * I know which man that saw Robin.

(7) * This is the person who Mary thinks that sneezed.

(8) Robin knows that doubt Mary John never could.

(9) * Who does Robin know that doubt Mary never could?

(10) * I wonder if could you move your car from in front of my driveway? (L&H 2006, (102a))

(11) I wonder if at one point could you move your car from in front of my driveway? (L&H 2006, (102b))
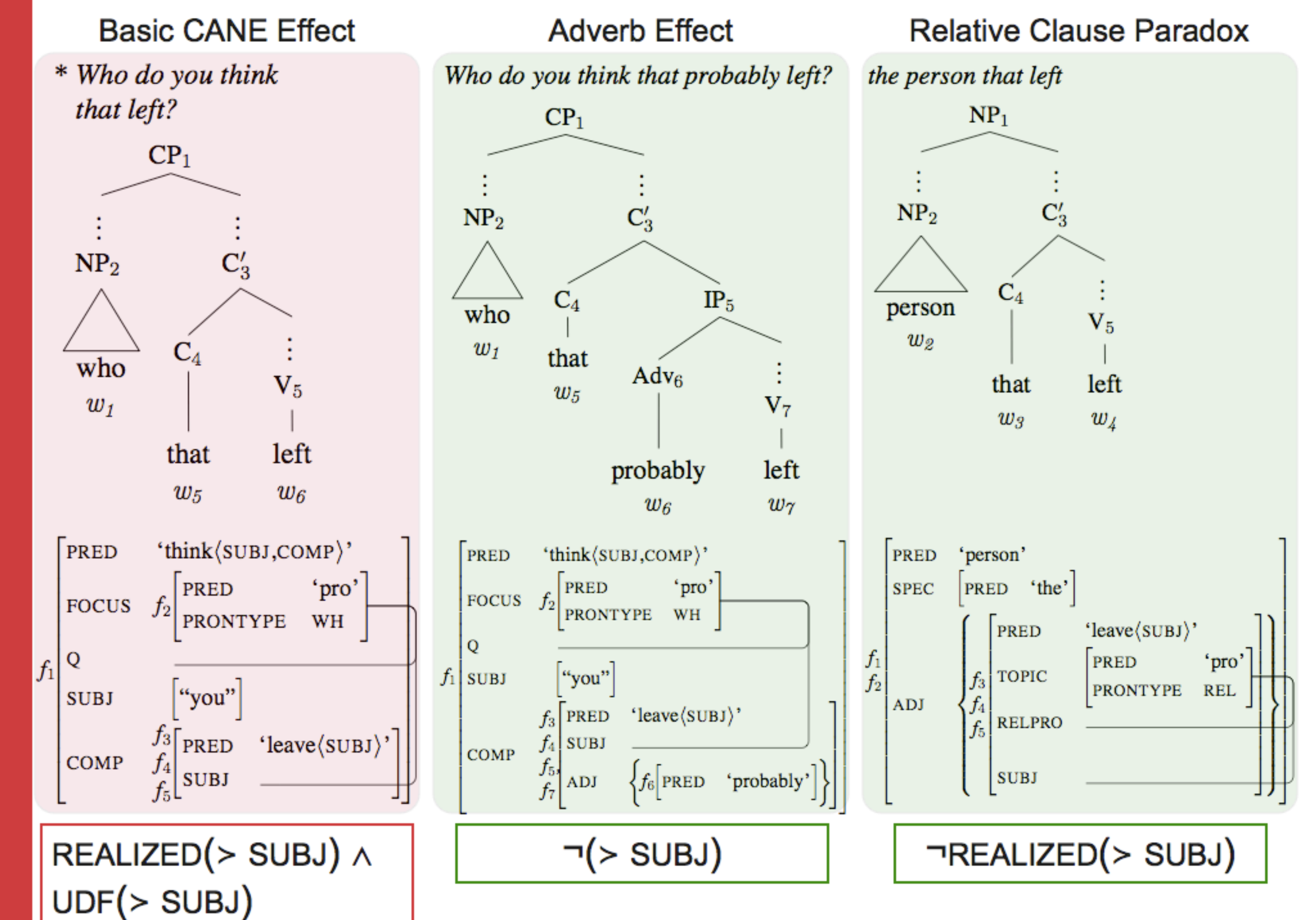
Previous Proposals

❖ Fixed Subject Constraint (Bresnan 1972)[2, 3, 0]

❖ Complementizer Constraint on Variables (Bresnan 1977)[3, 0]

❖ That-Trace Filter (Chomsky & Lasnik 1977)[2, 3, 0]

❖ Subject Extraction Metarule/Trace Principle (Gazdar 1981, Pollard & Sag 1994)[1, 2, 3?, 4, 0]

❖ ECP Analyses (Kayne 1981, Pesetsky 1982, Koopman 1983, Lasnik and Saito 1984, Rizzi 1990)[1, 2, 3?, 4, 0]

❖ Polarity Phrase (Culicover 1991)[2, 3?, 0]

❖ CP Expansion (Browning 1996, Rizzi 1997)[2, 3?, 4, 0]

❖ CP Contraction (Sobin 1987, 2002)[2, 3?, 0]

❖ Intervention Constraint (Levine & Hukari 2006)[2, 3?]

Problem Index
[1] Adverb Effect, [2] Relative Clause Paradox, [3] Embedded VP Topics, [4] Embedded Auxiliary Inversion, [0] Others

Analysis

- N: $W \to W$, where W is the set of words in the string

- $\text{REALIZED}(f)$ iff $\phi^{-1}(f) \neq \emptyset$, where f is an f-structure

- $\succ := \phi(\mathcal{M}(\pi(\text{N}(\pi^{-1}(*)))))$

- CANE Constraint:
$\neg[\text{REALIZED}(\succ \text{SUBJ}) \wedge (\text{UDF}(\succ \text{SUBJ}))]$
where UDF is an unbounded dependency function (FOCUS or TOPIC)

- $that/whether/if\ldots, \text{C} \quad \neg[\text{REALIZED}(\succ \text{SUBJ}) \wedge (\text{UDF}(\succ \text{SUBJ}))]$

Basic CANE Effect — Adverb Effect — Relative Clause Paradox

REALIZED($\succ$ SUBJ) $\wedge$ UDF($\succ$ SUBJ) — $\neg(\succ$ SUBJ) — $\neg$REALIZED($\succ$ SUBJ)

Summary

❖ **String to f-structure:** Syntax–Phon. Interface

❖ **Lexicalist:** variation

❖ **Unified analysis of** *that*

❖ Unified analysis of CANE:
1. Basic CANE Effect
2. Adverb Effect
3. Relative Clause Paradox
4. Embedded VP Topics

❖ Embedded Aux Inversion?

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