Structural and semantic ambiguity of *why*-questions

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Puzzle

- Stepanov & Tsai (S&T, 2008): cross-linguistic variation in the interpretation of *why*-questions

    — Mandarin, Polish, Russian: both reason and purpose *why* are available

    — English: no lexical entry for purpose *why*

- **New observation:** English *why*-questions truly ambiguous but only with certain predicates

(1) Why did she resign?

    a. **Purpose:** For what purpose did she resign? (future-oriented)

    e.g., In order to earn more money next year

    b. **Reason:** What was the reason for her resigning? (past-oriented)

    e.g., Because she got a pay cut

- Non-agentive predicates: only reason reading available (see Tsai (2008) and S&T (2008) for a similar pattern in Mandarin and Russian; see Jędrzejowski (2014) for similar data in Polish)

(2) **Dynamic:** Why did John tear down the wall?

    a. ✓Purpose: to build a newer one
    b. ✓Reason: because he felt like it

(3) **Passive:** Why was that competitor hit?

    a. #Purpose: to help him get an easier opponent
    b. ✓Reason: because the instructor felt like it

(4) **Unaccusative:** Why did John arrive?

    a. #Purpose: to make the party more lively
    b. ✓Reason: because he was invited

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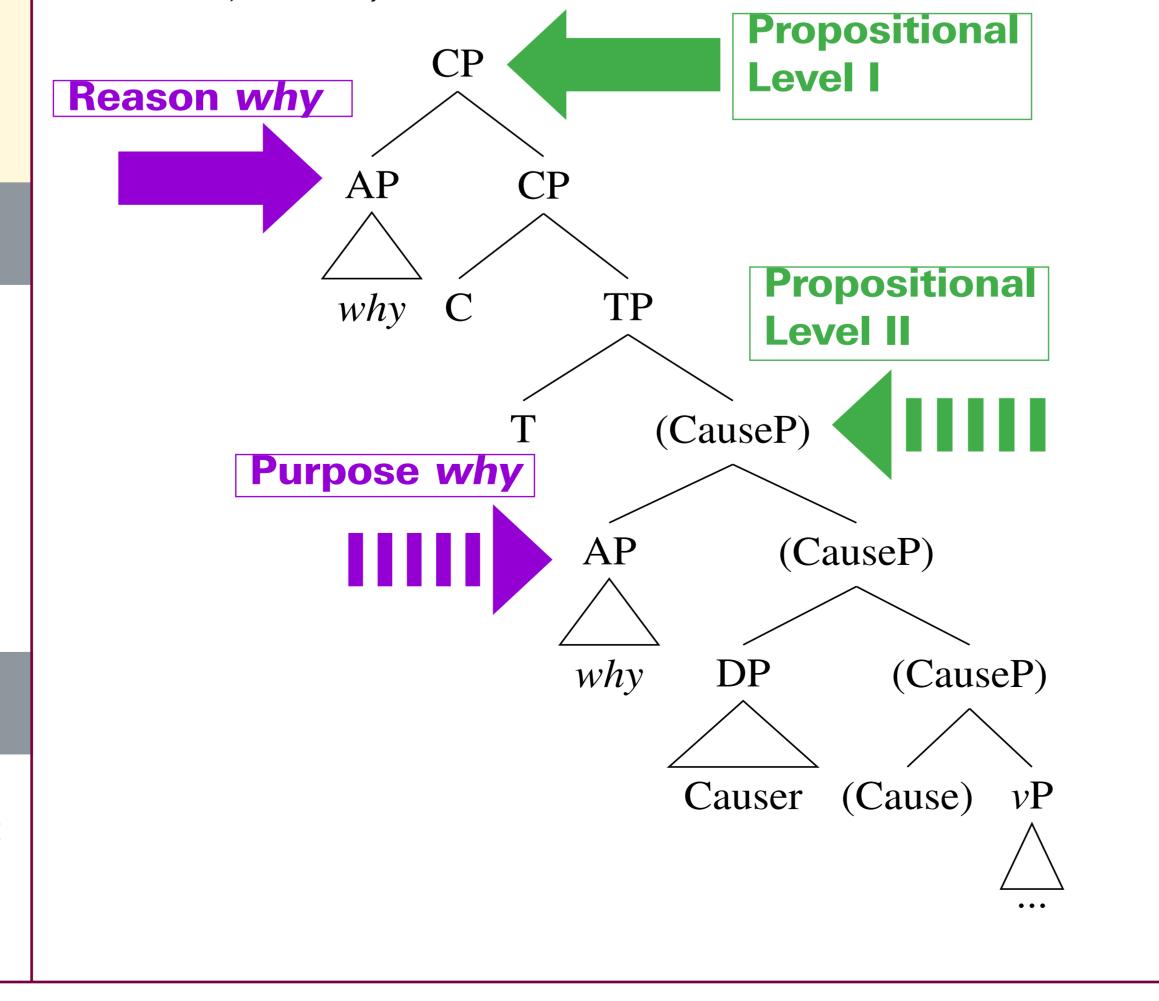
Acknowledgements

Proposal

Two attachment sites

1. **Reason *why*:** base-generated in CP (Hornstein, 1995; Rizzi, 1990, 2001; Ko, 2005; S&T, 2008; Thornton, 2008)

2. **Purpose *why*:** adjoined to vP (Tsai, 2008; S&T, 2008)

- Why do only certain predicates allow both attachment sites?

Not all predicates have both attachment sites

- *Why* modifies a proposition

    — Needs to adjoin to a propositional level

- More than one *why* = more than one proposition

- Bale (2007): predicates differ in their propositional complexity

    — Some predicates have only one propositional level while others have two

- Only propositionally complex predicates can have two attachment sites for *why*:

    — **dynamic predicates:** 2 propositions = 2 attachment sites

    — **non-agentive predicates** (e.g., passives, unaccusatives): 1 proposition = 1 attachment site

- For concreteness, we link the additional propositional level to an additional functional projection in the vP phase: CauseP (Kratzer, 1996; Marantz, 1997)

Predictions
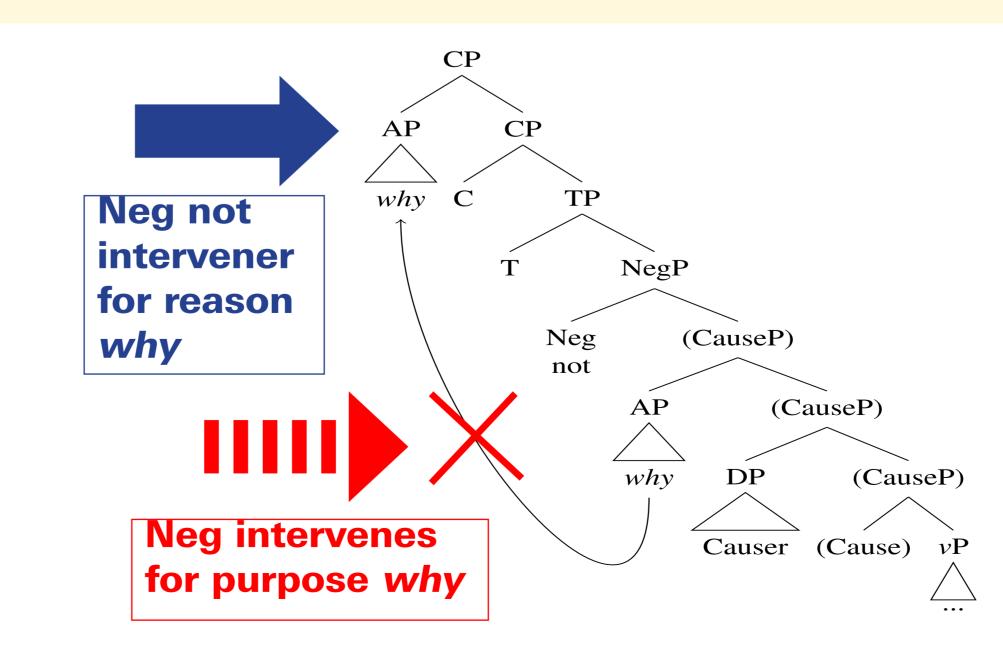
Prediction 1: More complex structure = 2 readings

- Simplex vP = no purpose reading

- More structural material → more complex vP → ✓ purpose reading

- Wurmbrand (2001, 2007): structural size of an infinitive depends on structural material merged

- **Prediction:** increasing the size of the vP structure using *for*-infinitives should make the purpose reading available

(5) **Passive:** Why was that competitor hit?

    #to help him get an easier opponent (tomorrow)
    ✓for him to get an easier opponent (tomorrow)

(6) **Unaccusative:** Why did John arrive?

    #to make the party more lively
    ✓for the party to be more lively

Prediction 2: Negative *why*-questions

- Negation is intervener for adjunct *wh*-movement (weak island, Beck 2006)

- If two readings correspond to two different structural positions, we predict:

    (a) purpose *why* (merged below negation) **will be sensitive** to *wh*-intervention effects

    (b) reason *why* (merged above negation) **should not be affected** by negation

(7) Context: To put in a pool in one's backyard, there must be a wall in place.

    Why didn't John tear down the wall?

    #to put in a pool (this summer)
    ✓because he didn't want to show off

Prediction 3: downward entailing quantifiers and modal obviation

- If negation effect is a weak island effect, then:

(a) **existential modals** should obviate the weak island (Fox & Hackl, 2006; Abrusán, 2007; Dotlačil & Nouwen, 2014); purpose reading should become available even in negative *why*-questions

(8) Why didn't John tear down the wall?

    ✓Existential: to be allowed to put in a pool
    #Universal: to be required to put in a pool

(b) any **downward entailing element** should yield a weak island effect; purpose reading should not be available in a downward entailing environment, irrespective of type of predicate

(9) Why did the professors attend the party?

    ✓to get to know the graduate students
    ✓because they thought it would be fun

(10) Why did few professors attend the party?

    #to eat all the snacks
    ✓because they thought it would be boring

Summary and Conclusions

- English *why*-questions are **ambiguous** between a reason and purpose interpretation

- Purpose and reason *why* are **structurally distinct**

    — Correspond to two different attachment sites for *why* (reason: CP and purpose: vP)

- Purpose reading dependent on a **more complex structure**: two propositional levels are needed

    — Explains why only a subset of predicates allow both readings

- Evidence for two attachment sites comes from:

    — Manipulation of structural complexity of vP

    — Sensitivity of purpose *why* to *wh*-intervention effects, i.e., negation (weak island effect)

    — Weak island effect with purpose *why* can be obviated by existential modals and appears in downward entailing environments

- Data pattern further supports a **semantic analysis** of weak islands (Beck & Rullmann, 1999) over a Relativized Minimality account (Rizzi, 1990, 2004)