

DERIVING PS-PARADOXES BY ECONOMY CONDITIONS ON MERGE

A. Pesetsky (1995) observes that (1) manifests a Phrase Structure (PS) Paradox, which arises from conflicting evidence elicited by constituency tests for the internal organization of the VP. While VP-Fronting (VP-F) to the exclusion of a remnant (*on each other's birthdays*) indicates that the VP-shell is left-branching, anaphora licensing signals a right-branching VP. This talk pursues two goals: First, I present evidence in support of a remnant movement analysis of (1) and against the parsing account of Phillips (1996, to appear). Second, based on a contrastive study of the interpretive properties of adjunct remnants in VP-F and VP-Ellipsis (VP-E; (2)), I will advance arguments for the view that economy conditions do not only control movement processes but also regulate - in an indirect way - the second structure building operation Merge. This conception entails as a theoretical consequences that economy conditions cannot be computed locally, but need to be evaluated on the basis of domains at least as large as phases.

B. In Phillips (1996), structure is built incrementally by a left-to-right parser, which merges categories low at the right periphery ((3)). On this view, the fronted VP-copy in (1) forms a constituent which matches the lower VP-copy at an early stage of the derivation ((4)a/b), followed by low attachment of the remnant PP ((4)c), yielding the correct c-command relations. The analysis captures e.g. the contrast between VP-F ((1)) and VP-E ((5)). The parallelism requirement on VP-E requires both adjunct remnants in (5) to be merged above the VP, bleeding the context for anaphoric binding. However, the parsing account is challenged by the observations that adjunct remnants inside the antecedent clause of VP-E attach low ((6); cf. (5)), and that QP remnants in VP-F take scope above VP-internal QPs ((7); Sauerland 1998), indicating that they are merged above the VP even in VP-F. Furthermore, Phillips (to appear; 39f) has to stipulate that remnants in VP-F must not be separated by islands from the positions in which they are interpreted ((8)).

C. The approach towards the PS-Paradox (1) and the interpretive properties of remnants in VP-E consists of two components. First, (1) is analyzed as an instance of remnant topicalization (den Besten and Webelhuth 1990), i.e. the remnant is extracted out of the VP prior to VP-F. This directly accounts for restrictions on scope ((7)), which fall out from the general theory of Scope Freezing, and locality conditions on remnants ((8)). Second, reconstruction asymmetries of adjunct remnants stranded by VP-F and VP-E with regard to Principle A, Principle C and quantifier scope are attributed to the interaction between economy and the assumption that adjuncts may be merged freely, subject to principles of type-driven interpretation. More specifically, (VP-) adjuncts modify predicates of events ($\langle \epsilon, t \rangle$; ϵ for eventuality) and can attach low, adjoined to VP, or high, adjoined to vP. Objects move to SpecvP, from where they c-command the lower, but not the higher adjunct position ((9)a). The choice between high and low Merge is regulated by economy and construction specific properties of VP-F and VP-E: ♦ VP-F targets the higher shell (vP), which includes the subject trace, as witnessed by the absence of Multiple Binding Domain Effects with VP-F ((10)b; Huang 1992). Thus, the remnant has to move prior to VP-F, regardless whether it is merged high or low. Low attachment results now in reconstruction for Principle A ((1)), whereas high attachments leads to obviation of Principle C ((11)). (Based on data from Aoun and Li 1993: 153f, it will be shown that the MLC evaluates movement from Adv-high and Adv-low as equally costly). ♦ No such context restriction holds for VP-E, which may target vP or VP (subject to semantic parallelism; Fox 1999; Rooth 1992). However, out of the four combinatorial possibilities (high/low Merger and vP/VP-deletion), only one derivation harmonizes optimally with the economy metric on movement. In particular, remnant movement can be avoided only if the adjunct remnant is attached high, followed by phonological suppression of the VP ((12); Objects move to check Case *covertly*, and are therefore contained within VP when ellipsis applies at Spell-Out.) As the adjunct resides now outside the c-command domain of objects, it is prohibited from 'reconstructing' for Principle A ((5)) as well as for Principle C ((13); cf. (11)). The derivation in terms of low attachment and ellipsis of vP depicted in (9)b is blocked, as (9)b necessitates an additional movement operation (adjunct movement). Finally, deletion of VP invariably requires movement of the remnant out of the ellipsis site.

D. The analysis entails that economy cannot be computed locally, as the choice between adjunct movement in the competing derivations for VP-E ((12) vs. (9)b) cannot be decided before the full vP has been assembled.

(1) VP-F (PS-PARADOX)

John intended to give the book to the children, and
 [_{VP} give the books to them_i] he did on each other_i's birthdays

(2) John gave the book to the children on Monday, and Mary did on Friday.



(4) John intended to give the book to the children, and... (= (1))

a. [_{VP} give [the books [to [them]]]] (...)

b. [_{VP} give [the books [to [them]]]] he did [_{VP} give [the books [to [them]]]]

c. ... he did [_{VP} give [the books [to **them_i** [on [each other_i's birthdays]]]]]

(5) VP-E, 2ND CONJUNCT: PRINCIPLE A

*John [_{VP} gave the books to **them** on each other's birthdays] and
 Mary did $\hat{\Delta}$ on each other's first day of school ($\hat{\Delta}$ = [_{VP} gave books to them])

(6) VP-E, 1ST CONJUNCT: PRINCIPLE A

John gave books to **them** on each other's birthdays and Mary did $\hat{\Delta}$ on their first day of school

(7) SCOPE FREEZING

David planned to give every handout to one of the students and

[_{VP} give **every handout**] David did to one of the students * $\forall > \exists / \exists > \forall$

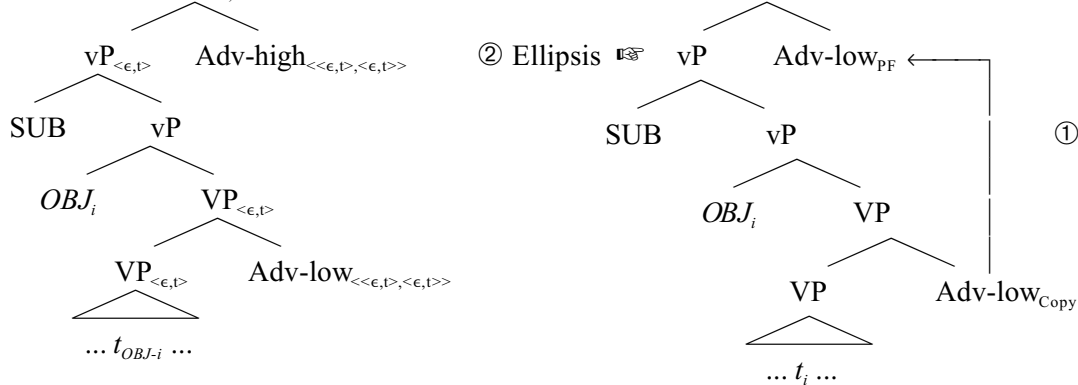
(8) LOCALITY

They wanted to assign each problem to a student who was asleep in class,

a. ...and [_{VP} assign **each problem_i** to a student who was asleep during *its_i* presentation] they did

b. *...and [_{VP} assign **each problem_i** to a student who was asleep] they did during *its_i* presentation

(9) a. $vP_{\langle \epsilon, t \rangle}$ b. XP VP-E, LOW MERGER



(10) a. [Which book about herself] does she think he is reading

b. *...and [_{VP} t_k reading a book about herself] she thinks he_k is

(11) VP-F: OBVIATION OF PRINCIPLE C

John promised to give the books to her, and give the books to **her_i** he did on *Mary_i*'s birthday.

(12) VP-E, HIGH MERGER: [_{VP} ... *Ellipsis* ...] Adv-high

(13) VP-E, 2ND CONJUNCT: PRINCIPLE C (Phillips 1996: p. 62, fn. 41)

*?John gave books to her_i on *Mary_i*'s birthday and Jill did at Christmas.