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“Multiple-Specifier” Configurations Revisited*

Hisatsugu Kitahara

I. Strong Minimalist Thesis

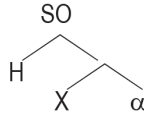
- (1) Strong Minimalist Thesis (SMT)
language is a “perfect system,” meeting the interface conditions in a way satisfying third factor principles
- (2) the “perfect system” must have Merge, and ideally only this one, and we expect this very simple, Merge-based system to interact with third factor principles such as Minimal Search (MS)
- (3) What results can we get from the interaction of Merge and MS?

II. Problems of Projection

- (4) $\text{Merge}(\alpha, \beta) = \{\alpha, \beta\}$
- (5) a. Merge applies freely as long as it conforms to third factor principles
b. Merge does not encode a label
- (6) Chomsky (2013) takes such labeling to be “just minimal search, presumably appropriating a third factor principle, as in Agree and other operations”

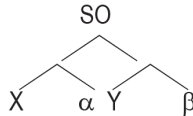
* This is the handout used in the workshop entitled “Language Variation Revisited: From Externalization Perspectives” (organized by Shinichi Kitada), held at the 37th Conference of the English Linguistic Society of Japan (Kwansei Gakuin University, November 9, 2019). The research, reported here, is part of a joint project with Samuel D. Epstein and T. Daniel Seely.

- (7) $SO = \{H, \{X, \alpha\}\}$.



MS finds H as the label of SO since H is unambiguously identifiable, provided that XP is $\{X, \alpha\}$; it cannot serve as a label for a SO

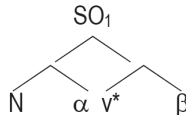
- (8) $SO = \{\{X, \alpha\}, \{Y, \beta\}\}$.



MS is ambiguous, locating both the head X of XP and the head Y of YP; left as is, labeling fails and Full Interpretation is violated at CI: the ambiguity being intolerable

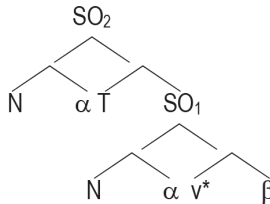
- (9) a. modify SO so that there is only one visible head
 b. X and Y are identical in a relevant respect, providing the label of the SO

- (10) $SO_1 = \{\{N, \alpha\}, \{v^*, \beta\}\}$.



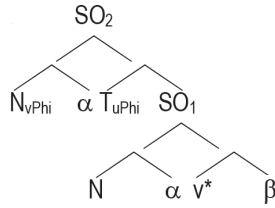
- (11) γ is taken to be in domain D iff every occurrence of γ is a term of D

- (12) $SO_1 = \{\{N, \alpha\}, \{v^*, \beta\}\}$.



MS finds the only “visible” head v^* as the label of SO_1 (provided that the lower copy of $\{N, \alpha\}$ is invisible)

- (13) $SO_2 = \{\{N, \alpha\}, \{T, SO_1\}\}$.

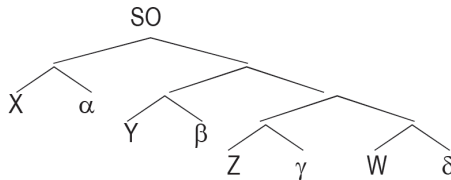


the pair of v(alued)Phi on N and u(nvalued)Phi on T undergoes valuation, and counts as the label of SO_2

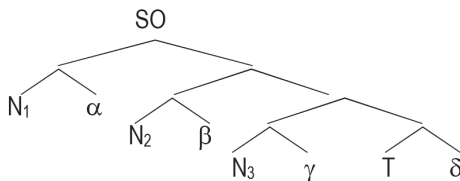
- (14) the labeling theory explains when movement may take place or must take place, and when movement terminates: it does automatically. (see also Chomsky 2019 MIT/UCLA lectures)

III. Multiple-Specifier Constructions Revisited

- (15) $SO = \{\{X, \alpha\}, \{\{Y, \beta\}, \{\{Z, \gamma\}, \{W, \delta\}\}\}\}$



- (16) What counts as the first head(s) in (15)? Should X be the first head?
- (17) Bunmeikoku-ga dansei-ga heikin-zyumyoo-ga mizikai
civilized.country-NOM male-NOM average-life.span-NOM short-Pres.
'It is in civilized countries that male's average life span is short.'
- (18) $SO = \{\{N_1, \alpha\}, \{\{N_2, \beta\}, \{\{N_3, \gamma\}, \{T, \delta\}\}\}\}$

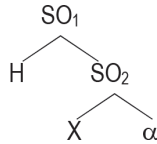


- (19) in (18), MS finds the three heads N_1, N_2, N_3 , and the finite T (and only them), so that the valuation of NOM by finite T on each NP will take place, and the uCase-vTense pair will count as the label of SO.
- (20) what we need to make sure is that MS finds all and only those four heads for computation, specifically, valuation and labeling, but at the same time, we have to explain why “multiple-specifier” configurations, such as Japanese multiple subjects (17), are not available for languages such as English

IV. Minimal Search Defined and Unified

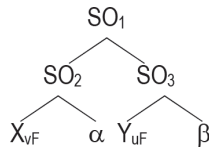
- (21) MS finds a target in the optimal way via the shortest possible path. (Chomsky 1995)

- (22) $SO_1 = \{H, \{X, \alpha\}\}$.

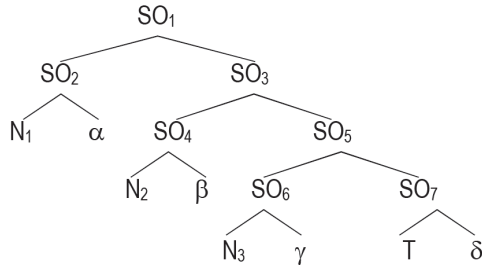


- (23) a shorter path is selected over a longer one
- (24) the path of α is the set of all SOs of which α is a term (note the non-reflexive definition of term is adopted here); then, the path of α is shorter than the path of β iff the path of α is a proper subset of that of β (cf. Pesetsky 1982, May 1985)
- (25) MS selects H over X because the path of H (= $\{SO_1\}$) is a proper subset of the path of X (= $\{SO_1, SO_2\}$); hence, only H counts as an accessible head for labeling.

- (26) $SO_1 = \{\{X, \alpha\}, \{Y, \beta\}\}$.

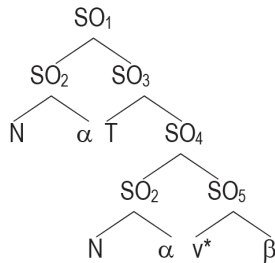


- (27) Searching for head(s), MS selects both X and Y because neither the path of X (= {SO₁, SO₂}) nor the path of Y (= {SO₁, SO₃}) is a proper subset of the other. So, both X and Y are located by MS, and they count as accessible heads for labeling and valuation.
- (28) SO₁ = {{N₁, α}, {{N₂, β}, {{N₃, γ}, {T, δ}}}}



- (29) under this system, MS finds N₁, N₂, N₃, and finite T (and only them) because there is no proper subset relation among the following four relevant sets: (i) the path of N₁ (= {SO₁, SO₂}), (ii) the path of N₂ (= {SO₁, SO₃, SO₄}), (iii) the path of N₃ (= {SO₁, SO₃, SO₅, SO₆}), and (iv) the path of finite T (= {SO₁, SO₃, SO₅, SO₇}).

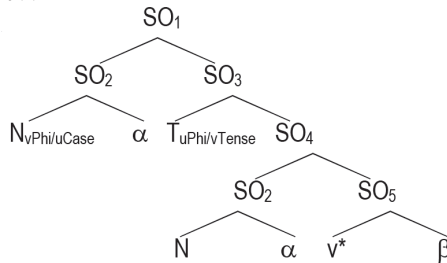
- (30) SO₁ = {{N, α}, {T, β}}.



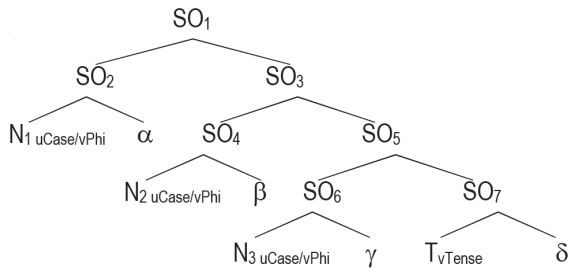
- (31) the higher copy of SO₂ (= {N, α}) is available, but the lower copy of SO₂ (= {N, α}) is not, because the path of the higher copy of SO₂ (= {SO₁}) is a proper subset of the path of the lower copy of SO₂ (= {SO₁, SO₃, SO₄}).
- (32) Anything that is found in the shortest possible way counts as an accessible term for computation, where the notion “shorter” is understood in terms of “proper subset”

V. Explaining why “multiple-specifier” configurations exist in some languages, but not in others

- (33) What determines the presence (or absence) of “multiple-specifier” configurations? What separates Japanese from English?
- (34) “multiple-specifier” configurations appear as long as MS finds one and only one valuing head per agreement-relation, that is, for each unvalued feature *uF-valuee*, there is one and only one valued feature *vF-valuer*
- (35) every SO, including “multiple-specifier” configurations, must yield a unique identification for labeling
- (36) $SO_1 = \{\{N, \alpha\}, \{T, \beta\}\}$.

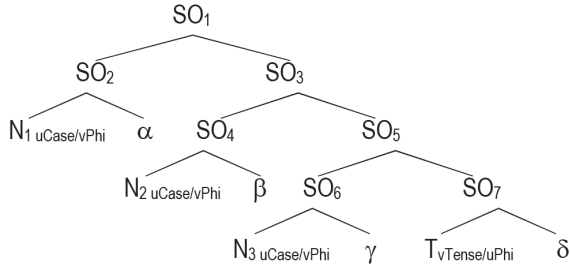


- (37) for each uF-valuee (uPhi, uCase), there is one and only one vF-valuer (vPhi, vTense); hence, the two pairs, uPhi-vPhi and uCase-vTense, constitute a unique label
- (38) $SO_1 = \{\{N_1, \alpha\}, \{\{N_2, \beta\}, \{\{N_3, \gamma\}, \{T, \delta\}\}\}\}$



(39) for each uF-valuee (uCase), there is one and only one vF-valuer (vTense);
hence, the pair uCase-vTense constitutes a unique label.

(40) $SO_1 = \{ \{N_1, \alpha\}, \{ \{N_2, \beta\}, \{ \{N_3, \gamma\}, \{T, \delta\} \} \}$



(41) the three nominal heads N1, N2, N3, bearing vPhi, each participate in valuing uPhi on finite T; hence, there would be no single phi-valuer because the three nominal heads N1, N2, N3 bear distinct phi-sets and each participate in phi-valuation, thereby failing to yield a unique phi-label

[A] Unlike English, Japanese has no uPhi (see (38))

(42) What separates Japanese from English, with respect to the licensing of “multiple-specifier” configurations, is the absence of uPhi on Japanese T. The presence of uPhi on English T blocks “multiple-specifier” configurations. If there were two or more distinct vF-valuers for one uF-valuee, then a labeling failure would result. (for earlier proposals, see Fukui 1986, Kuroda 1988; for recent discussion, see Epstein, Kitahara, and Seely 2019, Saito 2016, Sorida 2014)

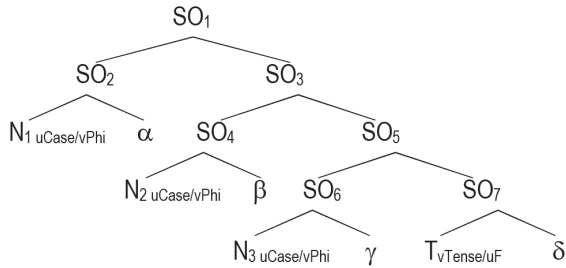
[B] Unlike English uPhi, Japanese uPhi has no morpho-phonological realization (see (40))

(43) What separates Japanese from English, with respect to the licensing of “multiple-specifier” configurations, is the absence of morpho-phonological realization of uPhi on Japanese T. If there were two or more distinct vF-valuers for one uF-valuee, then there would be no way to realize such multiple phi-

sets on the single head. But unlike English, Japanese has no such morpho-phonological realization of uPhi; hence this externalization problem can be circumvented. (Kitada pc.)

[C] UG has uF, but in English, uF realizes as uPhi, whereas in Japanese, uF remains as uF (see (44))

(44) $SO_1 = \{\{N_1, \alpha\}, \{\{N_2, \beta\}, \{\{N_3, \gamma\}, \{T, \delta\}\}\}\}$



- (45) i. UG has unvalued feature uF
 iia. in English, uF is realized as uPhi that matches Phi and gets Phi-valued
 iib. in Japanese, uF is realized as uF with no property that matches any F but gets no value
 iii. valuation takes place only if a valuer has some unvalued feature (i.e. the activity condition, Chomsky 2000)
 iva. English finite T values uCase on N as long as uPhi on T remains unvalued, meaning only once
 ivb. Japanese finite T values uCase on N as long as uF on T remains unvalued, meaning continuously
 va. English uPhi realizes morpho-phonologically (sometimes vacuously)
 vb. Japanese uF never realizes morpho-phonologically (because F has no value)
 vi. the role of uF is to mark phases and allow valuation (for relevant discussion, see Fujita, Uchibori, and Kitahara 2017)
- (46) This analysis is arguably consistent with the uniformity hypothesis. That is,

UG says finite T values Case iff it bears uF. But in English, uF is realized as uPhi, and uPhi gets Phi-valued, so Case-valuation happens only once. In Japanese, however, uF remains as uF, and uF matches but remains unvalued, so Case-valuation may happen continuously (thereby allowing “single-” as well as “multiple-specifier” configurations to appear)

- (47) UG has uF, but in English, uF is realized as uPhi, whereas in Japanese, uF remains as uF. So, if English changes from uPhi (back) to uF, then it becomes like Japanese; if Japanese changes from uF (on) to uPhi, then it becomes like English. One might argue that such language change is hard to imagine under the assumption that English has uPhi but Japanese doesn't.

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