

The ‘only’-concord in Vietnamese: Support for the bipartite analysis and Undermerge

BACKGROUND. Quek & Hirsch (2017) (based on previous work including Cable 2010; Lee 2005) propose a bipartite analysis of association with focus constructions. Under their analysis (Q&H), a focus construction ‘only’ involves two heads: one on the clausal spine (Foc), and one more local to the focused constituent (Q). English can either realize the Foc head with the sentential/adverbial ‘only’ (*only_S*) or realize the Q head with the constituent/adnominal ‘only’ (*only_C*), as in (1); yet only the clausal head is interpreted at LF, contributing the standard Rooth’s semantics of ‘only’, as reproduced in (2).

(1) [_{TP} John₁ [**Foc** [_{VP} t₁ eats [**Q** beef_F]]]]; *Either one of the heads can be realized in English:*

- a. John **only_S** eats beef_F. (*only_S* realizes **Foc**)
 b. John eats **only_C** beef_F. (*only_C* realizes **Q**)

(2) The semantics of **Foc** (based on Rooth 1985): $[[\text{only}]](C) = \lambda p_{st} \lambda w: p(w). \forall p' \in C [p'(w) \rightarrow p \subseteq p']$

Q&H briefly mentions Vietnamese data (originally reported in Hole 2013) provides direct support for the bipartite structure in (1) since this language not only allows the overt realization of either Foc head or Q head with adverbial *chỉ* or adnominal *mỗi* as in (3a, b) just like English, but also allows the **realization of both heads** (‘only’-concord): (3c) has a single focus reading just like (3a, b).

- (3) a. Nam **chỉ** ăn THỊT BÒ b. Nam ăn **mỗi** THỊT BÒ c. Nam **chỉ** ăn **mỗi** THỊT BÒ
 Nam *only_S* eat beef Nam eat *only_C* beef Nam *only_S* eat *only_C* beef
 ‘Nam **only eat** beef_F’ ‘Nam **eat only** beef_F’ ‘Nam **only eat** beef_F’

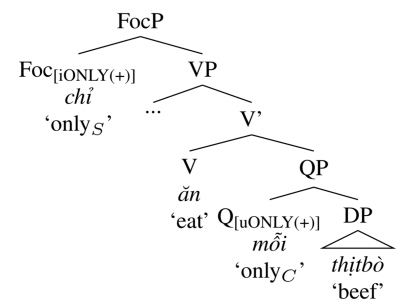
MAIN CLAIMS. This paper first presents novel scope data in Vietnamese that supports the bipartite analysis and then shows that the optional focus movement of adnominal *mỗi* can be captured by utilizing the syntactic operation ‘Undermerge’ (Pesetsky 2013, Yuan 2017) in the bipartite analysis.

I. SUPPORT FOR BIPARTITE ANALYSIS. When there is another scope-taking predicate like a modal verb in the sentence, adverbial *chỉ* always exhibits surface scope (4) while adnominal *mỗi* exhibits scope ambiguity (5); when the two co-occur, the sentence is not ambiguous and the scope site of ‘only’ is determined by the position of adverbial *chỉ*, as in (6).

- (4) a. Nam **chỉ** có thể ăn THỊT BÒ b. Nam có thể **chỉ** ăn THỊT BÒ
 Nam *only_S* can eat beef Nam can *only_S* eat beef
 ‘Nam is **only** allowed to eat beef_F’ (only>◇) ‘Nam is allowed to **only** eat beef_F’ (◇>only)
- (5) Nam có thể ăn **mỗi** THỊT BÒ
 Nam can eat *only_C* beef
 ‘Nam is **only** allowed to eat beef_F’ or ‘Nam is allowed to **only** eat beef_F’ (only>◇; ◇>only)
- (6) a. Nam **chỉ** có thể ăn **mỗi** THỊT BÒ b. Nam có thể **chỉ** ăn **mỗi** THỊT BÒ
 Nam *only_S* can eat *only_C* beef Nam can *only_S* eat *only_C* beef
 ‘Nam is **only** allowed to eat beef_F’ (only>◇) ‘Nam is allowed to **only** eat beef_F’ (◇>only)

Following Q&H, the Foc head bears an interpretable but unvalued operator feature [*i*ONLY(+)] and the Q head bears an uninterpretable but valued feature [*u*ONLY(+)]. The Foc head agrees with Q to get its feature valued as shown in (7). Since only the adverbial *chỉ* realizes the semantically contentful Foc head and Q head is semantically vacuous, we expect both the cases in which *chỉ* occurs alone as in (4) and the cases in which *chỉ* co-occurs with adnominal *mỗi* as in (6) to have the semantic scope of ‘only’ to be determined by the surface position of adverbial *chỉ*. For the sentence in which *mỗi* occurs alone as in (5), the scope ambiguity is expected since the covert Foc head can be either above the modal verb or below it.

(7) **Foc** Agrees with **Q**:



II. FOCUS MOVEMENT. In Vietnamese adnominal *mỗi* can also undergo optional focus movement (together with its DP host) to either the post-subject or clause-initial position, as shown in (8a, b). Although the particle *mỗi* is preferred in most cases, it is not required for the subject-focus examples. This is one of the reasons that I do not follow Hole (2017) in analyzing the fronting in (8) as movement into a projection headed by *mỗi* (With more space I’ll provide another argument against the Spec-Head analysis

for a *mỗi*-phrase and the particle *mới*, which is based on the difficulty of deriving the clause-initial position of a *mỗi*-phrase due to *Freezing effect*).

- (8) a. Nam [**mỗi** THỊTBÒ]₁ mới ăn t₁ b. [**mỗi** THỊTBÒ]₁ Nam mới ăn t₁
 Nam only_C beef PRT eat only_C beef Nam PRT eat
 ‘[Only beef_F] does Nam eat’ ‘[Only beef_F] does Nam eat’

Interestingly, the fronted **adnominal** *mỗi* exhibits surface scope as in (9) even though the in-situ **adnominal** *mỗi* gives rise to scope ambiguity as shown in (5).

- (9) a. Nam [**mỗi** THỊTBÒ]₁ mới có thể ăn t₁ c. Nam có thể [**mỗi** THỊTBÒ]₁ mới ăn t₁
 Nam only_C beef PRT can eat Nam can only_C beef PRT eat
 ‘Nam is only allowed to eat beef_F’ (only>◇) ‘Nam is allowed to eat only beef_F’ (◇>only)
 b. [**mỗi** THỊTBÒ]₁ Nam mới có thể ăn t₁
 only_C beef Nam PRT can eat
 ‘Nam is only allowed to eat beef_F’ (only>◇)

Under Q&H, such movement can be captured by an optional [EPP] feature on the Foc head (see their discussion about the ‘even’-construction in Singapore English) as in (10). FocP can occur either above VP or above TP; the fronted position of adnominal *mỗi* thus indirectly indicates the position of the covert Foc head, which in turn constrains the scope of ‘only’ in (9). For (9a, b) the scope of ‘only’ must be above that of the modal while in (9c) the scope of ‘only’ must be below that of the modal.

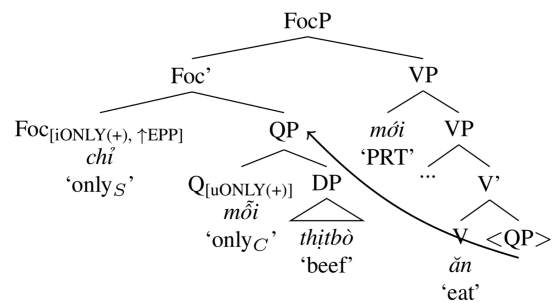
- (10) [_{FocP} [_Q [_{uONLY(+)} beef]₁] [_{Foc} **Foc**_{iONLY(+),EPP}] [_{TP/VP} Nam mới ăn t₁]] (For (8a, b))

What’s unexpected is when **adverbial** *chỉ* co-occurs with **fronted adnominal** *mỗi*, the two are indeed adjacent but they actually occur in the **adverbial-adnominal order** as in (11). No other word order is possible if a single focus reading is intended even if the positions of adverbial *chỉ* and the fronted adnominal *mỗi* as in (12) are independently possible when they do not co-occure as in (6a) and (9c).

- (11) a. Nam **chỉ** [**mỗi** THỊTBÒ]₁ mới có thể ăn t₁ (only>◇)
 b. **chỉ** [**mỗi** THỊTBÒ]₁ Nam mới có thể ăn t₁ (only>◇)
 c. Nam có thể **chỉ** [**mỗi** THỊTBÒ]₁ mới ăn t₁ (◇>only)

- (12) *Nam **chỉ** có thể [**mỗi** THỊTBÒ]₁ mới ăn t₁
 Nam only_S can only_C beef PRT eat
 Int: ‘Nam is only allowed to eat beef_F’

UNDERMERGE. Whereas the **adverbial-adnominal order** resulted by the focus movement cannot be captured by the standard movement-to-specifier operation, I argue it can be captured by the operation ‘Undermerge’: (i) the Foc head bears an optional [↑EPP] feature; (ii) the [↑EPP] feature on Foc head has to be checked by movement of QP to its complement position (i.e. ‘Undermerge’), as shown in (13). Note ‘Undermerge’ has been independently used in Yuan (2017) to address a focus-related construction in Kikuyu after the original proposal by Pesetsky (2013).



CONCLUSIONS AND REMAINS. This paper presents novel data of the scope phenomena and focus movement of Vietnamese ‘only’, which not only provides cross-linguistic support for the bipartite analysis of focus constructions, but also identifies another instantiation of the operation ‘Undermerge’ in which a phrase moves into a complement position. With more space, I will compare the current analysis to previous accounts of Vietnamese *mỗi* (Hole 2017; Erlewine 2017) and show that their proposal cannot be directly extended to account for the data.

REFERENCES. Quek, Yihui, and Aron Hirsch. 2017. Severing focus form and meaning in standard and Colloquial Singapore English. Yuan, Michelle. 2017. Movement to complement in Kikuyu and the syntax of focus association. Cable, Seth. 2010. The grammar of Q: Q-particles, wh-movement, and pied-piping. Lee, Youngjoo. 2005. Exhaustivity as agreement: The case of Korean *man* ‘only’. Hole, Daniel. 2017. A crosslinguistic syntax of scalar and non-scalar focus particle sentences: The view from Vietnamese and Chinese.