

Claim

The typology of repairs in verbal fronting is accounted for by interaction of the **order of post-syntactic operations** Head Movement (HM) and Copy Deletion (CD) with the **size of the moved constituent**.

(1)	Order of post-syntactic operations		
	HM > CD	CD > HM	Surface
full VP	verb copy	dummy verb	VP fronting
remnant VP	verb copy	dummy verb	V fronting
bare V	verb copy	verb copy	V fronting

Two repairs in verbal fronting

Many languages allow the *displacement of a verbal constituent into the left periphery*. Often this displacement induces a focus or topic interpretation of the fronted constituent.

Observation 1: In the absence of auxiliaries or modals, verbal fronting triggers one of two strategies of gap avoidance: (i) a copy of the verb stays behind (2), or (ii) a semantically largely vacuous dummy verb is inserted (3).

Observation 2: Languages that allow both verb and verb phrase fronting symmetrically show the same strategy of gap avoidance in both cases.

(2) *Hebrew verb doubling* (Landau 2006: 37)

- liknot**, hi **kanta** et ha-praxim
buy.INF she bought ACC the-flowers
'As for buying, she bought the flowers.'
- [**liknot** et ha-praxim], hi **kanta**.
buy.INF ACC the-flowers she bought
'As for buying the flowers, she bought (them).'

(3) *German dummy verb insertion* (Diedrichsen 2008: 221)

- waschen tut** er das Auto nie
wash.INF does he the car never
'He never washes the car.'
- [das Auto **waschen**] **tut** er nie
the car wash.INF does he never
'Something that he never does is wash the car.'

Commonly, verbal fronting as presented above can be shown to be \bar{A} -movement as it is unbounded and shows island effects.

A new pattern and the typology

Asante Twi (Kwa, Niger-Congo) and Limbum (Grassfields Bantu, Niger-Congo) show an asymmetric pattern: A verb copy in verb fronting (4a) & (5a) but a dummy verb in verb phrase fronting (4b) & (5b).

- si(-é)** na Kofi á-**si**/*á-**yó** dán.
build-NMLZ FOC Kofi PRF-build/PRF-do house
'Kofi has built a house. (not e.g. bought one)'
 - [dán **si**](**-é**) na Kofi *á-**si**/*á-**yó**
house build-NMLZ FOC Kofi PRF-build/PRF-do
'Kofi has built a house. (not e.g. bought a boat)' (Asante Twi)
- á r-**yū** (cí) njíwè fí bí **yū**/*gī msān
FOC 5-buy (COMP) woman DET FUT1 buy/do rice
'The woman will buy rice.'
 - á r-[**yū** msān] (cí) njíwè fí bí ***yū**/**gī**
FOC 5-buy rice (COMP) woman DET FUT1 buy/do
'The woman will buy rice.' (Limbum)

It can be shown for the two languages that verbal fronting involves \bar{A} -movement and that verb and verb phrase fronting largely behave alike with respect to other properties as well (e.g. whether they allow TAM-marker or adverbs in the fronted constituent).

Note: The reverse Asante Twi pattern, namely a dummy verb in verb fronting and a verb copy in verb phrase fronting could be determined to be unattested in a sample of 45 languages that have been reported and documented to exhibit verbal fronting and/or verb doubling.

⇒ There is a **systematic gap** in the typology of repair patterns.

Typology of repair patterns in verbal fronting

(6)	fronting		languages
	verb	verb phrase	
I	verb copy	verb copy	Hebrew, ...
II	dummy verb	dummy verb	German, ...
III	verb copy	dummy verb	Asante Twi, Limbum
IV	dummy verb	verb copy	—

Preliminaries to the analysis

- Copy Theory of Movement (Chomsky 1995) ⇒ Doubling is spell-out of multiple copies (Abels 2001, Nunes 2004)
- Head movement is a post-syntactic operation (Chomsky 1995, Schoorlemmer & Temmerman 2012) that does not leave any copies (Boeckx & Stjepanović 2001)
- \bar{A} -head movement into specifier position is possible in syntax (Koopman 1984, Vicente 2007, 2009)
- (Post-)syntactic operations apply in a sequential order (see Arregi & Nevins 2012, Schoorlemmer 2012)
- **Copy Deletion does not apply to the lowest copy of an \bar{A} -head movement chain**

Analysis

HM > CD & \bar{A} -head movement ⇒ Hebrew (Pattern I)

verb fronting	verb phrase fronting
(7) liknot , hi kanta et ha-praxim buy.INF she bought ACC the-flowers 'As for buying, she bought the flowers.'	(8) [liknot et ha-praxim], hi kanta . buy.INF ACC the-flowers she bought 'As for buying the flowers, she bought (them).'
Syntax [_{CP} [_{VP} V] [_C C [_{TP} S ⁱ [_{TP} T [_{VP} S ⁱ [_V v [_{VP} V] O]]]]]]]]]	Syntax [_{CP} [_{VP} V O] [_C C [_{TP} S ⁱ [_{TP} T [_{VP} S ⁱ [_V v [_{VP} V O]]]]]]]]]
Post-syntax HM: [_{CP} V] [_C C [_{TP} S ⁱ [_{TP} T [_{VP} V +v+T [_{VP} S ⁱ [_V v [_{VP} O]]]]]]]]]	Post-syntax HM: [_{CP} [_{VP} V O] [_C C [_{TP} S ⁱ [_{TP} T [_{VP} V +v+T [_{VP} S ⁱ [_V v [_{VP} O]]]]]]]]]
CD: [_{CP} V] [_C C [_{TP} S ⁱ [_{TP} T [_{VP} V +v+T [_{VP} S ⁱ [_V v [_{VP} O]]]]]]]]]	CD: [_{CP} [_{VP} V O] [_C C [_{TP} S ⁱ [_{TP} T [_{VP} V +v+T [_{VP} S ⁱ [_V v [_{VP} O]]]]]]]]]]

HM > CD & remnant VP movement ⇒ Polish (Pattern I)

verb fronting	verb phrase fronting
(9) wypić (to) Marek wypije herbatę, ale... drink.INF TO Marek will.drink tea but 'As for drinking, Marek will drink tea, but...'	(10) [wypić herbatę] (to) Marek wypije , ale... drink.INF tea TO Marek will.drink but 'As for drinking tea, Marek will drink it, but...'
Syntax [_{CP} [_{VP} V O ⁱ] [_C C [_{TP} S ⁱ [_{TP} T [_{AspP} Asp [_{VP} S ⁱ [_V v [_{VP} V O ⁱ]]]]]]]]]]	Syntax [_{CP} [_{VP} V O] [_C C [_{TP} S ⁱ [_{TP} T [_{VP} S ⁱ [_V v [_{VP} V O]]]]]]]]]
Post-syntax HM: [_{CP} [_{VP} V O ⁱ] [_C C [_{TP} S ⁱ [_{TP} T [_{AspP} V +v+Asp [_{VP} S ⁱ [_V v [_{VP} O ⁱ]]]]]]]]]]	Post-syntax HM: [_{CP} [_{VP} V O] [_C C [_{TP} S ⁱ [_{TP} T [_{AspP} V +v+Asp [_{VP} S ⁱ [_V v [_{VP} O]]]]]]]]]
CD: [_{CP} [_{VP} V O ⁱ] [_C C [_{TP} S ⁱ [_{TP} T [_{AspP} V +v+Asp [_{VP} S ⁱ [_V v [_{VP} Oⁱ]]]]]]]]]]]	CD: [_{CP} [_{VP} V O] [_C C [_{TP} S ⁱ [_{TP} T [_{AspP} V +v+Asp [_{VP} S ⁱ [_V v [_{VP} O]]]]]]]]]]

CD > HM & remnant VP movement ⇒ German (Pattern II)

verb fronting	verb phrase fronting
(11) waschen tut er das Auto nie wash.INF does he the car never 'He never washes the car.'	(12) [das Auto waschen] tut er nie the car wash.INF does he never 'Something that he never does is wash the car.'
Syntax [_{CP} [_{VP} O ⁱ V] [_C C [_{TP} L _{VP} S [_{VP} O ⁱ [_V v [_{VP} O ⁱ V] v]]] T]]]	Syntax [_{CP} [_{VP} O V] [_C C [_{TP} L _{VP} S [_{VP} O V] v]]] T]]]
Post-syntax CD: [_{CP} [_{VP} O ⁱ V] [_C C [_{TP} L _{VP} S [_{VP} O ⁱ [_V v [_{VP} Oⁱ V] v]]] T]]]	Post-syntax CD: [_{CP} [_{VP} O V] [_C C [_{TP} L _{VP} S [_{VP} O V] v]]] T]]]
HM: [_{CP} [_{VP} O ⁱ V] [_C C [_{TP} L _{VP} S [_{VP} O ⁱ [_V v [_{VP} Oⁱ V] v]]] T]]]	HM: [_{CP} [_{VP} O V] [_C C [_{TP} L _{VP} S [_{VP} O V] v]]] T]]]

CD > HM & \bar{A} -head movement ⇒ Asante Twi (Pattern III)

verb fronting	verb phrase fronting
(13) si(-é) na Kofi á- si /*á- yó dán. build-NMLZ FOC Kofi PRF-build/PRF-do house 'Kofi has built a house. (not e.g. bought one)'	(14) [dán si](-é) na Kofi *á- si /*á- yó house build-NMLZ FOC Kofi PRF-build/PRF-do 'Kofi has built a house. (not e.g. bought a boat)'
Syntax [_{CP} [_{VP} V] [_C C [_{TP} S ⁱ [_{TP} T [_{VP} S ⁱ [_V v [_{VP} V] O]]]]]]]]]	Syntax [_{CP} [_{VP} V O] [_C C [_{TP} S ⁱ [_{TP} T [_{VP} S ⁱ [_V v [_{VP} V O]]]]]]]]]
Post-syntax CD: [_{CP} [_{VP} V] [_C C [_{TP} S ⁱ [_{TP} T [_{VP} S ⁱ [_V v [_{VP} V] O]]]]]]]]]	Post-syntax CD: [_{CP} [_{VP} V O] [_C C [_{TP} S ⁱ [_{TP} T [_{VP} S ⁱ [_V v [_{VP} V O]]]]]]]]]]
HM: [_{CP} [_{VP} V] [_C C [_{TP} S ⁱ [_{TP} T [_{VP} V +v+T [_{VP} S ⁱ [_V v [_{VP} O]]]]]]]]]	HM: [_{CP} [_{VP} V O] [_C C [_{TP} S ⁱ [_{TP} T [_{VP} V +v+T [_{VP} S ⁱ [_V v [_{VP} V O]]]]]]]]]]

Prediction

Copies of \bar{A} -head movement will surface even if a gap is allowed, i.e. when fronting strands an auxiliary or modal (Hebrew, Trinh 2011: 32).

- [liknot et ha-sefer]₁ Dan *kiva* ____
buy.INF ACC the-book Dan hoped
'As for buying the book, Dan hoped to (do it).'
- liknot Dan *kiva* **liknot** et ha-sefer
buy.INF Dan hoped buy.INF ACC the-book
'As for buying, Dan hoped to buy the book.'

References