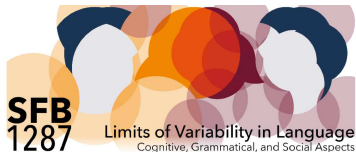


# The syntax of sharing constructions

## 2. Approaches to SCs

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## Exercise

Try to come up with derivations for the ATB example in (1). How could movement proceed to produce sharing (1 antecedent – several gaps)?

(1) **Who** does John like \_\_\_ and Mary hate \_\_\_ ?

# Overview

## ① Approaches to ATB

- Types of approaches

- Symmetric approaches

- Asymmetric approaches

- Sideward movement

## ② Approaches to RNR

## ③ Theory-internal problems with these approaches

# Types of approaches

- **symmetric:**
  - extraction takes place from all gap sites with one antecedent per gap
  - subextraction from all conjuncts
  - question: Why do we only see one antecedent on the surface?
- **asymmetric:**
  - the (visible) antecedent is extracted from only one of the gaps
  - question: Why do we get more than one gap?
- **mixed approach: sideward movement**  
extraction from all gap sites but the final movement of the antecedent to its surface position takes place from only one of the gaps (the initial one)
- ▶ In the tree structures that follow, we leave aside not immediately relevant steps/projections/differences between the approaches (e.g., the structure of coordination; the number of functional projections in the vP/TP/CP, intermediate movement steps, ...)

# Overview

## 1 Approaches to ATB

Types of approaches

Symmetric approaches

Asymmetric approaches

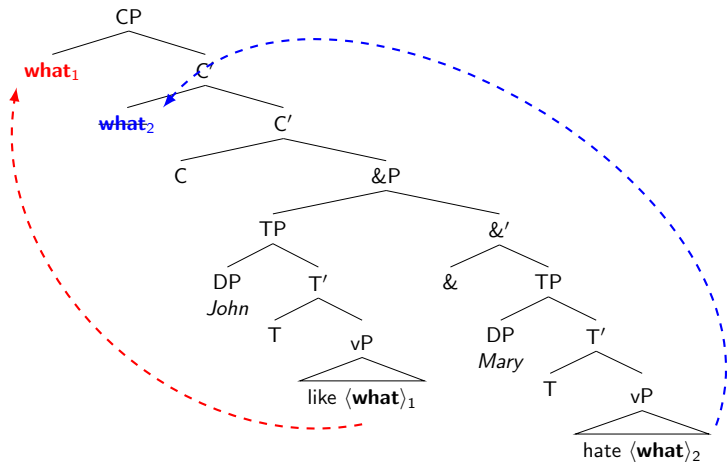
Sideward movement

## 2 Approaches to RNR

## 3 Theory-internal problems with these approaches

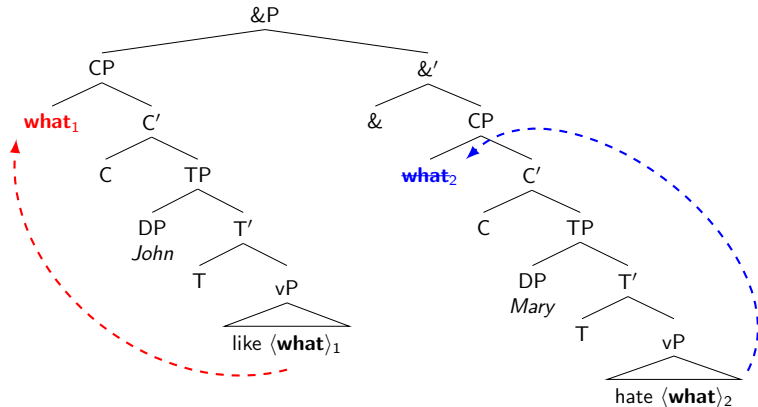
## “Haplology reduction”

a (distinct) antecedent per gap, all of them move to SpecC, only one is pronounced, the others are deleted at PF (e.g., to avoid haplology); old idea, but rarely adopted, though see Biskup (2018)



# Full CP-coordination + PF-deletion

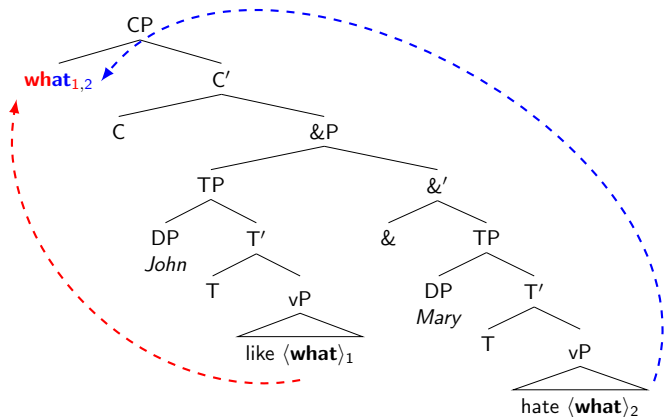
a (distinct) wh-element moves to SpecC of the respective CP-conjunct; all wh-elements but the one in the initial conjunct remain unpronounced (PF-deletion), see George (1980); Wilder (1994); ?



# Fusion

one antecedent per gap, all move to SpecC and fuse into a single occurrence  
(Ross 1967; Williams 1978; Hein and Murphy 2020; Blümel 2014; 2017)

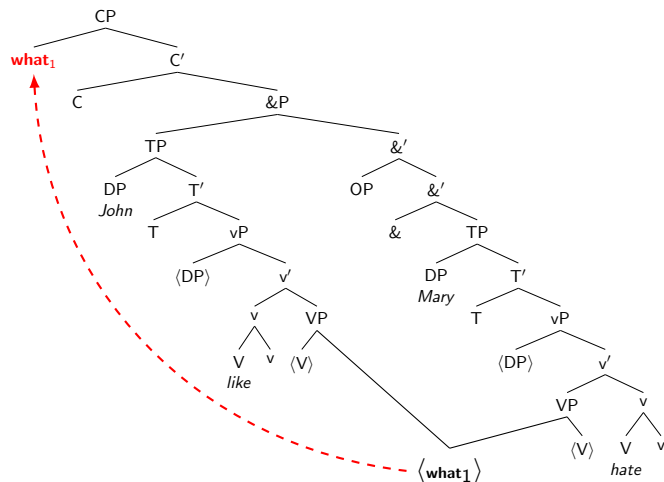
(HPSG slash feature percolation from each conjunct is also fusion-like, see Pollard and Sag 1994; Levine et al. 2001)





## Multi-dominance/remerger

The shared wh-XP is present only once in the structure, but it is merged simultaneously in all conjuncts; Williams (1978); Goodall (1987); Moltmann (1992); Citko (2005) Kasai (2007); Gračanin-Yüksek (2007; 2013); Bachrach and Katzir (2009a); de Vries (2013)



# Overview

## 1 Approaches to ATB

Types of approaches

Symmetric approaches

Asymmetric approaches

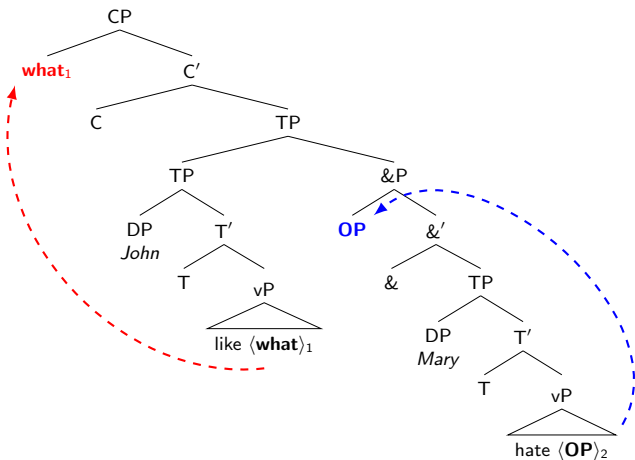
Sideward movement

## 2 Approaches to RNR

## 3 Theory-internal problems with these approaches

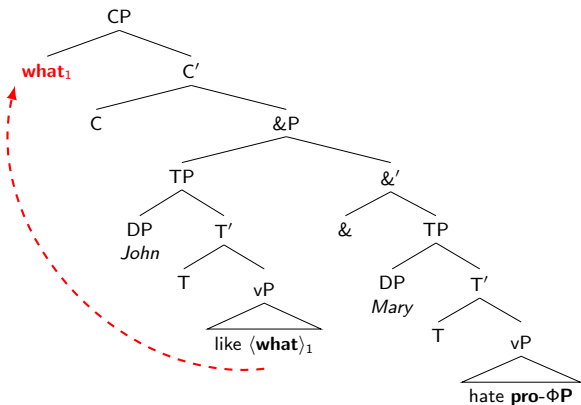
## Empty OP-movement ('parasitic gap approach')

asymmetric extraction of the visible antecedent from the first conjunct + movement of an **empty operator** (OP) inside the other conjunct(s); Munn (1992; 1993); Franks (1992; 1995); Bošković and Franks (2000); ▲ adjunction structure of &P  
 = the standard approach to pgs (Chomsky 1986)



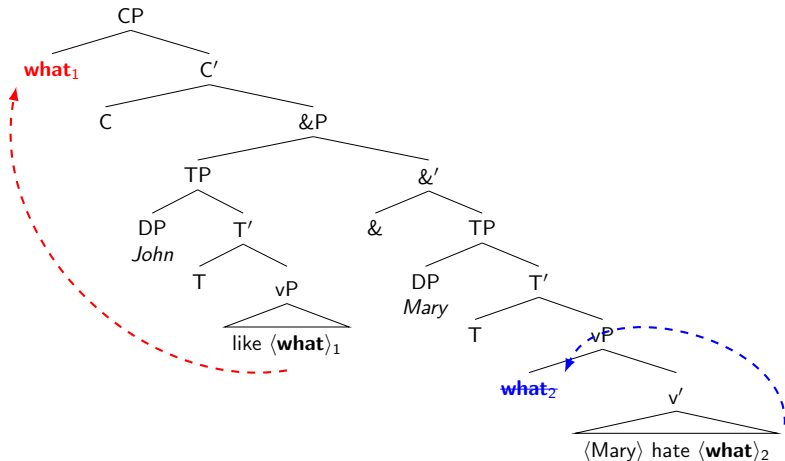
## *pro*-approach

Zhang (2010): asymmetric extraction of the visible antecedent from the first conjunct; the gap position in non-initial conjuncts is occupied by a silent pronoun, *pro*- $\Phi P$ , that is bound by the extractee



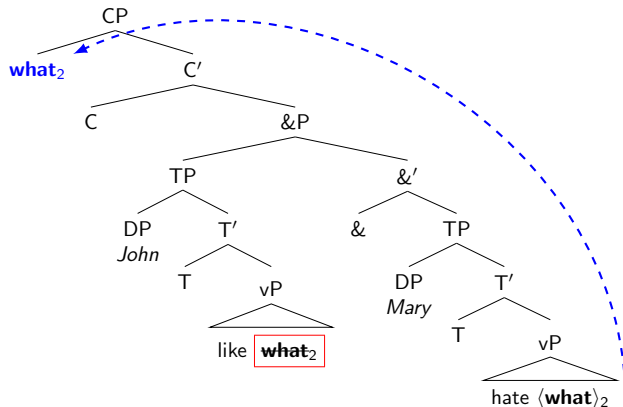
## 'Forward ellipsis'

extraction of the visible antecedent ( $\text{what}_1$ ) from the first conjunct + movement of distinct phrase ( $\text{what}_2$ ) inside the 2nd conjunct + ellipsis of  $\text{what}_2$  under identity with  $\text{what}_1$ ; Salzmann (2012a) (and related ideas in Wilder 1994)



## Backward ellipsis

extraction of the visible antecedent ( $\text{what}_2$ ) from the second conjunct + ellipsis of a distinct wh-element ( $\text{what}_1$ ) in the first conjunct under identity with  $\text{what}_2$ ; Ha (2008)



# Overview

## 1 Approaches to ATB

Types of approaches

Symmetric approaches

Asymmetric approaches

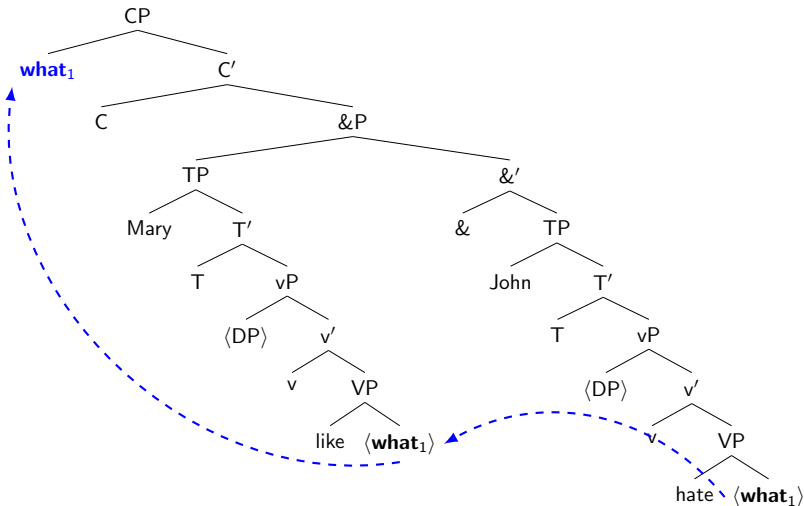
Sideward movement

## 2 Approaches to RNR

## 3 Theory-internal problems with these approaches

## Sideward movement

the single antecedent is base-merged in the second conjunct; it moves from its base-merge site directly to the gap site in the first conjunct, and from there to its terminal landing site; Nunes (2001; 2004); Hornstein and Nunes (2002)





# Overview

- 1 Approaches to ATB
  - Types of approaches
  - Symmetric approaches
  - Asymmetric approaches
  - Sideward movement
- 2 Approaches to RNR
- 3 Theory-internal problems with these approaches

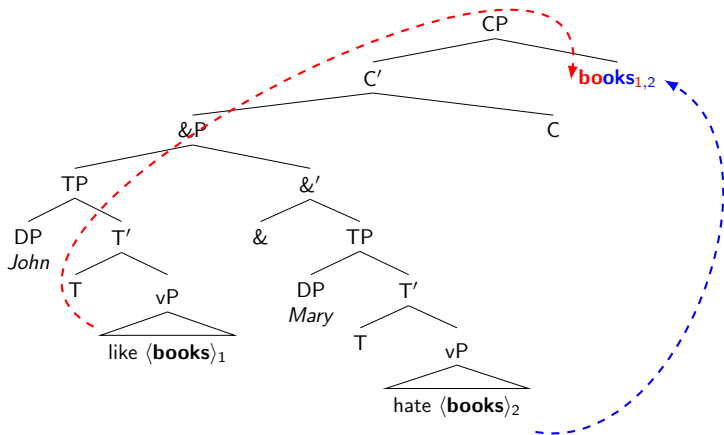
# Types of approaches

- the derivations adopted for RNR are a subset of those proposed for ATB
- types of approaches (Sabbagh 2014):
  - pivot-external / movement approach: movement + fusion
  - pivot-internal / in-situ approaches: multi-dominance, backward ellipsis
- example sentence:

(2) John likes, and Mary hates, **books (about linguistics)**.

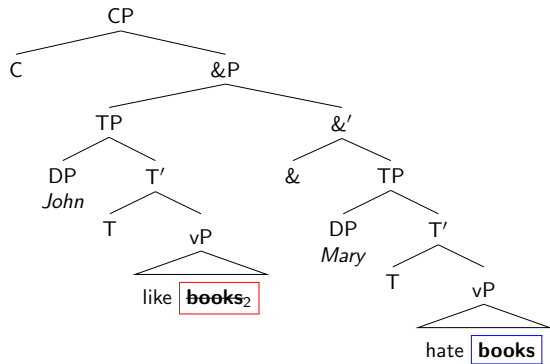
## Fusion ('movement approach' or 'rightward ATB')

one antecedent per gap, all move rightwards to SpecC and fuse there; see Ross (1967); Postal (1998); Sabbagh (2007; 2008); Clapp (2008)



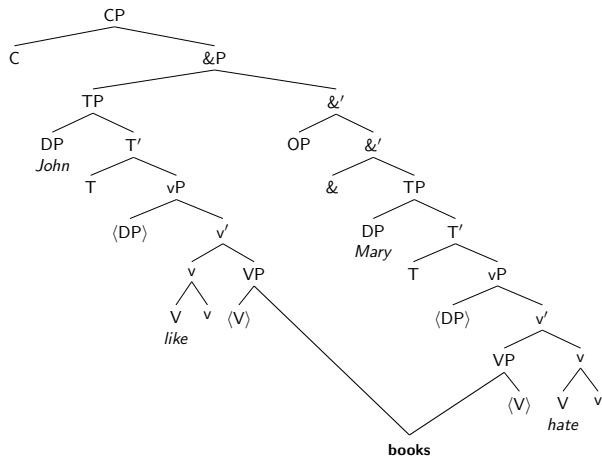
## Backward ellipsis

one object DP per conjunct, no extraction of any object DP;  $DP_2$  in the second conjunct stays in-situ;  $DP_1$  in the first conjunct is elided under identity with  $DP_2$ ; Wilder (1997); Giannakidou and Merchant (1998); Hartmann (2000); Abels (2004); Bošković (2004); Ha (2008)



## Multi-dominance

The shared wh-XP is present only once in the structure, but it is merged simultaneously in all conjuncts; no extraction of the shared XP, will be linearized at the right edge  
 McCawley (1982); Wilder (1999); de Vos and Vicente (2005); Bachrach and Katzir (2009*b*; 2017); Gračanin-Yüksek (2007); Grosz (2015)



# Overview of approaches to SCs

	ATB	RNR
haplology deletion	✓	
CP-coord.+deletion	✓	
move. +fusion	✓	✓
(3) MD + movement	✓	
MD (no movement)		✓
empty OP approach	✓	
forward ellipsis	✓	
backward ellipsis	✓	✓
sideward movement	✓	

# Overview

- 1 Approaches to ATB
  - Types of approaches
  - Symmetric approaches
  - Asymmetric approaches
  - Sideward movement
- 2 Approaches to RNR
- 3 Theory-internal problems with these approaches

# Theoretical problems with these approaches I

## ① MD + sideward movement:

- ⚡ **Theta Criterion** (Chomsky 1981): an argument DP can receive more than one  $\theta$ -role in these approaches  
 → if that is possible why is (4) ungrammatical?

(4)\*Anna cited.

intended: Anna cited herself. (Anna<sub><agent></sub>, <patient>)

not often addressed, but see Nunes (2001) on sideward movement and Grohmann (2003) for a proposal (unrelated to SCs)

- ⚡ **Case Filter** (Rouveret and Vergnaud 1980): an argument must receive case (usually exactly one)  
 → may not be a problem given overt case stacking (Plank 1995):

(5) Lardil (Richards 2013: 20)

Ngada derlde marun-ngan-i wangalk-i

I break boy-GEN-ACC boomerang-ACC

“ I broke the boy’s boomerang.”



## Theoretical problems with these approaches II

- ② sideward movement:  
gives up the assumption that movement targets a **c-commanding position**
  
- ③ asymmetric extraction approaches:  
seem to **violate the CSC**  
→ solution: the CSC is no a syntactic constraint on movement, but a **representational LF constraint** (see the Appendix for details); logic applied to RNR+ATB in Ha (2008) and to ATB in Salzman (2012*b*)
  
- ④ fusion:  
How exactly does fusion work and when/why is it triggered?  
→ often remains unaddressed, exceptions: fusion is achieved through (i) a construction-specific rule (Ross 1967; Williams 1978) or (ii) by feature intersection (Hein and Murphy 2020, see the Appendix for details)

## Theoretical problems with these approaches III

### 5 haplogy reduction:

- **postulates multiple wh-movement**, which is not independently attested in all of the languages that exhibit ATB, e.g., not in English; for these haplogy could be analyzed as a repair (see, e.g., Citko 2005)

(6) \*Who who(m) saw? (Who saw who(m)?)

**BUT: even languages with multiple wh-fronting can realize only a single antecedent in SCs:**

(7) Polish, Citko (2011: 57), Citko (2005: 492, fn.17):

- a. Co<sub>i</sub> [ Jan zgubił \_\_\_<sub>i</sub> ] a [ Piotr znalazł \_\_\_<sub>j</sub> ] ?  
 what Jan lost and Piotr found  
 'What did Jan lose and Piotr find?' (Joanna Zaleska, p.c.)
- b.\*Co<sub>i</sub> co<sub>j</sub> [ Jan zgubił \_\_\_<sub>i</sub> ] a [ Piotr znalazł \_\_\_<sub>j</sub> ] ?  
 what what Jan lost and Piotr found  
 'What did Jan lose and Piotr find?'

## Theoretical problems with these approaches IV

c. \*Kogo<sub>i</sub> komu<sub>j</sub> Jan lubi \_\_<sub>i</sub> a Maria się przygląda  
 who.ACC who.DAT Jan likes and Maria REFL looks.at  
 \_\_<sub>j</sub>?

“Who does Jan like and Maria looks at?”

- these arguments are not convincing, but the argument can be made with additional data, see the Appendix for discussion
- the deletion operation must be able to target entire phrases, which haplology otherwise does not do (de Vries 2017)

## Theoretical problems with these approaches V

- ⑥ multi-dominance:  
linearization problem (for example, the shared XP should precede itself)
  - Citko (2005): overt movement of the XP is necessary for linearization
  - alternative linearization algorithm, see, e.g., Wilder (1999); Bachrach and Katzir (2009a)
  
- ⑦ *pro*-approach: questionable for languages that do not have pro-drop
  
- ⑧ in general: why are the proposed mechanisms not available outside of coordination/adjunction structures?
  - hardly ever explicitly addressed; the Theta Criterion may help in those approaches that do not have to give it up anyway; but this only works for argument sharing

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