

# Hydras: Split Heads and Light Heads

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## > Introduction

This project aims to bring together analyses of hydras, split-antecedent relative clauses, and pronominal relative clauses within a Minimalist framework.

**Research Question:** How can a single analysis of split-antecedent relative clauses capture asymmetries between subjects/objects, split/adjacent heads, and nominal/pronominal heads?

## > Background

Previous analyses of split-antecedent hydras:

- **Ellipsis accounts** have been used for RNR, a similar phenomenon. Ellipsis cannot account for split antecedents licensing collective predicates like *each other*. [8]
- **Sideward movement has been proposed**, but the constraints on sideward movement with respect to c-command predict against anaphora licensing [16].
- **Multidominance** is a kind of structure where the same material can be merged twice. We're going with this one. [4, 10]

Not previously addressed:

- **An asymmetry between subjects and objects**
- **Problems with obligatory raising structures** and split antecedents
- **Pronominally headed** relative clauses, [6, 5] which also can't be split

## > Paradigm

Split antecedent RCs where the heads are subjects, and split antecedent RCs where the heads are pronouns are generally not allowed.

- \* **He** is a hero and she is a martyr who **sacrifice** everything.
  - \* A man rode a bike and a woman rode a scooter who love each other.
  - \* Men love him and women love her who are loyal to each other.
  - Tom met a man and Mary met a woman who know each other.
  - He and she who love each other can do anything together.
  - A man and a woman who love each other can do anything together.
  - Everyone loves him and her who are loyal to each other.
  - I saw a man and a woman who look alike.

### Summary of hydra grammaticality

Type of Hydra	Collective predicate	Non-collective
(1a): SPLIT - PRC - SUBJ	*	*?
(1b): SPLIT - HRC - SUBJ	*	*?
(1c): SPLIT - PRC - OBJ	*	*
(1d): SPLIT - HRC - OBJ	✓	✓
(1e): TOG - PRC - SUBJ	✓	✓
(1f): TOG - HRC - SUBJ	✓	✓
(1g): TOG - PRC - OBJ	✓	✓
(1h): TOG - HRC - OBJ	✓	✓

## > Pronominal hydras

Pronouns cannot be split heads of RCs.

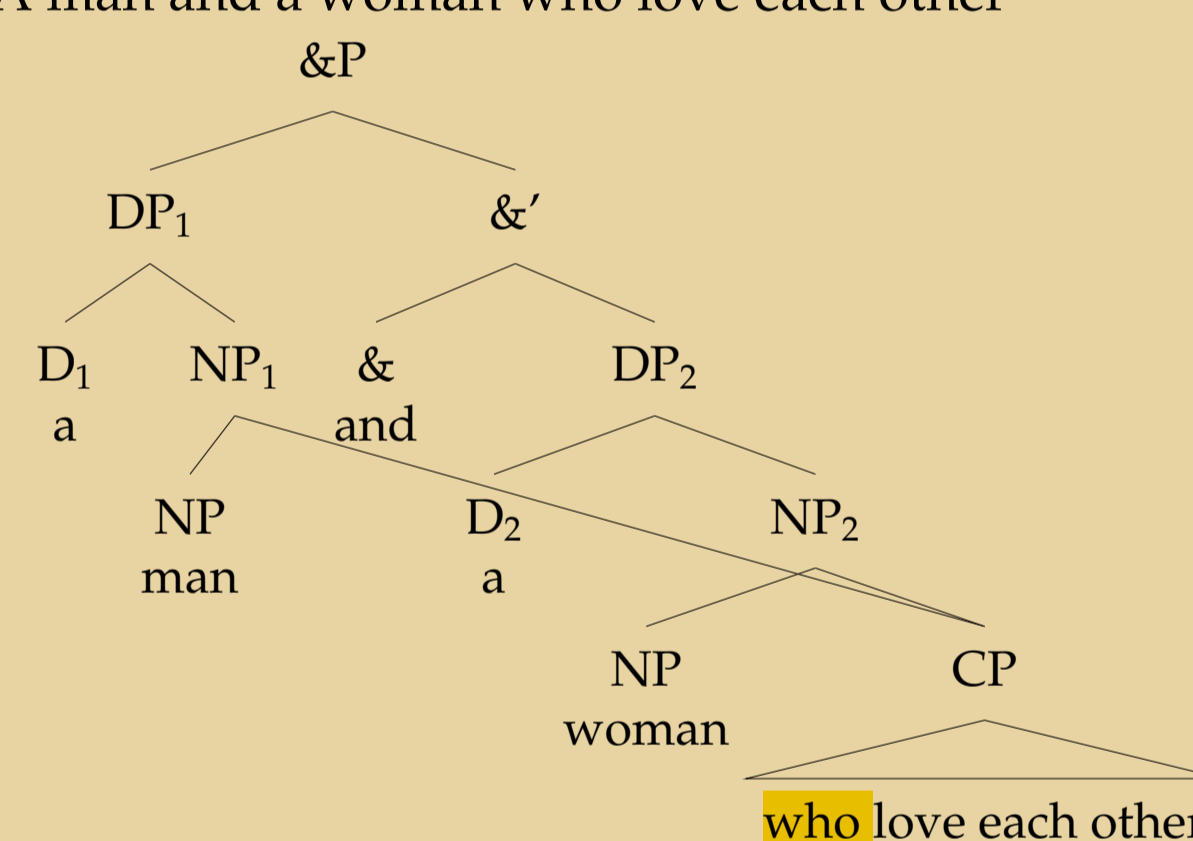
- \* **He** is a hero and **she** is a martyr who love each other.
  - \* Men respect **him** and women respect **her** who love each other.

Transitive subjects cannot be split heads of RCs (3a), but unaccusative subjects (3b) and objects (3c) can.

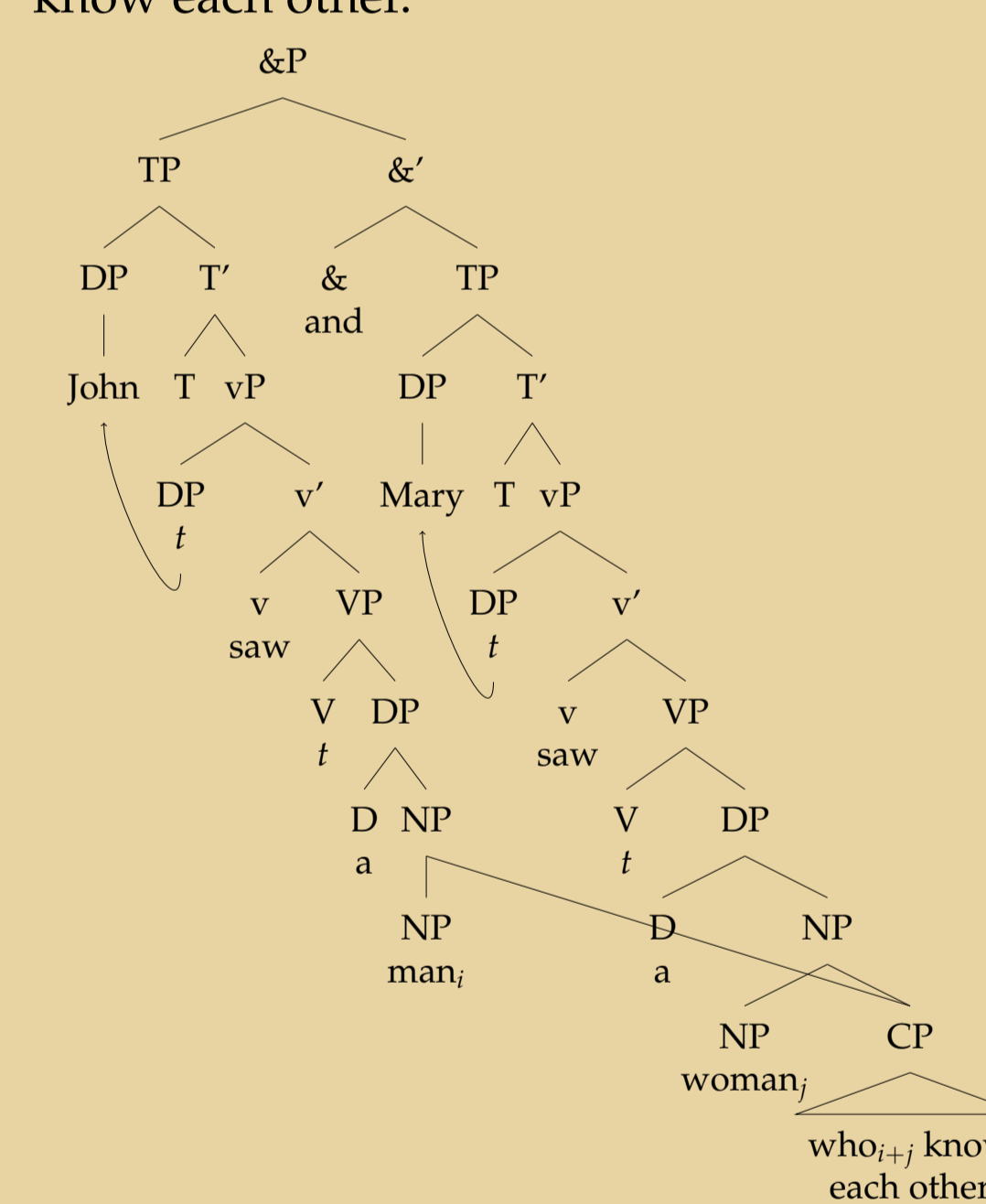
- \* **A man** rode a bike and **a woman** rode a scooter who love each other.
  - A man** came in and **a woman** went out who knew each other very well. [7]
  - John knew **a man** and Mary knew **a woman** who had children together.

## > Proposal

(4) **Contiguous heads with multidominance**  
A man and a woman who love each other



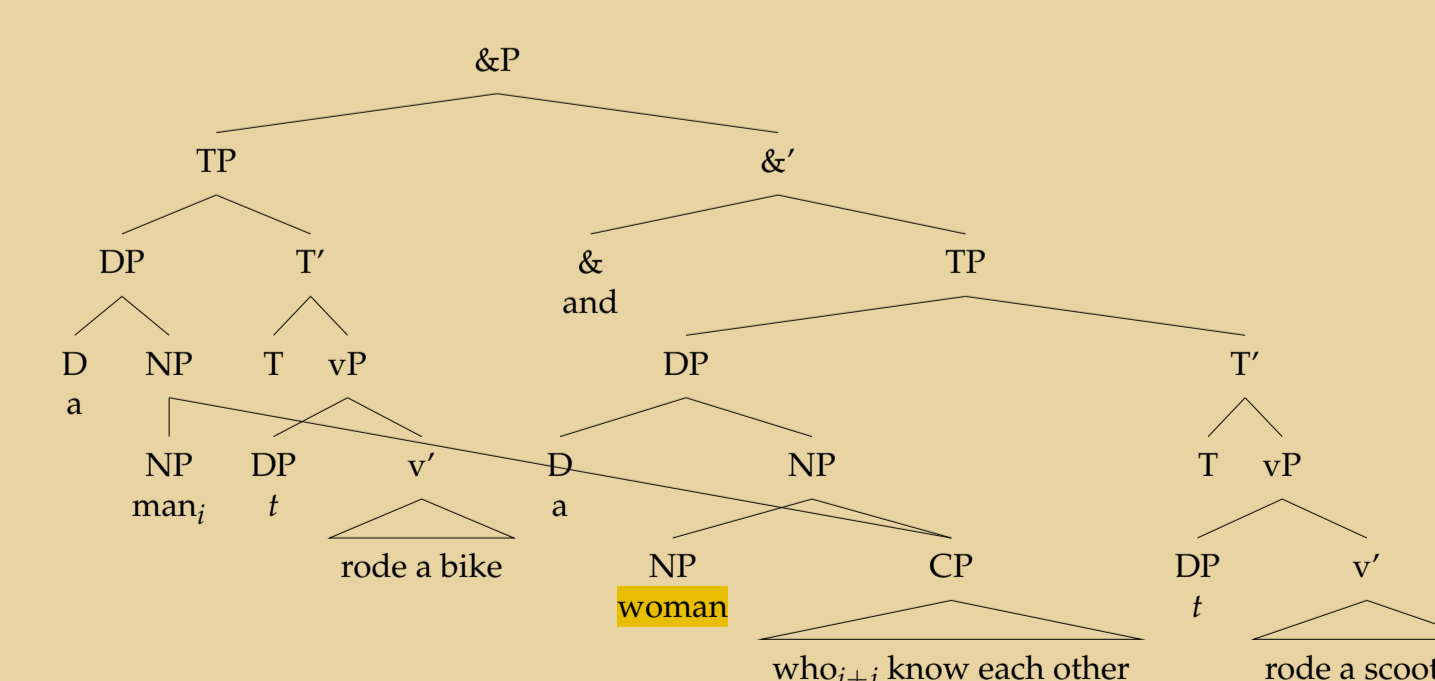
(5) **Split heads with multidominance**  
John saw a man and Mary saw a woman who know each other.



## > Restrictions

Split subjects are bad because of the Right Edge Restriction. [15]

(6) **Can't be linearized:**



Raising structures are also bad:

- \* Joan bought a painting of his<sub>i</sub> sister and Elizabeth commissioned a portrait of his<sub>i</sub> brother that every boy<sub>j</sub> will love.
  - \* Joan hated the beans and Elizabeth cried about the milk that I spilled.

## > Discussion

**Main takeaway:** multidominance can account for these structures so long as it is restricted by linearization algorithms and raising prohibitions.

This analysis provides support for:

- matching analysis of SARCs (Hulsey & Sauerland 2006)
- raising analysis of PRRCs (Conrod 2016)
- a multidominance analysis of RNR (Johnson 2007)
- the linearization algorithm that derives the Right Edge Restriction (Wilder 1999)
- a movement restriction on multidominant structures (new)

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