

# Postal 1994: Contrasting extraction types

LING 252 · Ethan Poole · 20 April 2020

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## 1 Two types of $\bar{A}$ -movement

### • *Uniformity of $\bar{A}$ -movement*

Chomsky (1977) brought together a bunch of movement types (i.e. transformations) into what we now recognize as  $\bar{A}$ -MOVEMENT:<sup>1</sup>

<sup>1</sup> Chomsky called them all just “*wh*-movement”.

#### (1) *Wh*-movement / $\bar{A}$ -movement properties

- a. it leaves a gap
- b. where there is a bridge, there is an apparent violation of subadjacency, PIC (propositional-island condition), and SSC (specified subject condition)  
→ i.e. it can occur long distance, across clause boundaries
- c. it observes the Complex NP Constraint
- d. it observes the *Wh*-island Condition

### • *Analyses with uniform leftwards extraction*

traces in GB,  $\uparrow$  and  $\downarrow$  in LFG, slash features in HPSG

### \* *Postal’s core empirical argument*

What we call “ $\bar{A}$ -movement” divides into two distinct movement types:<sup>2</sup>

<sup>2</sup> I generally do not use Postal’s own examples because, frustratingly, they are never minimal pairs.

#### (2) *A*-extractions<sup>3</sup>

- a. **Question extraction**  
What<sub>1</sub> did they say [ Fiona had eaten \_\_\_<sub>1</sub> ]?
- b. **Restrictive-relative extraction**  
the apple [ (which)<sub>1</sub> they said [ Fiona had eaten \_\_\_<sub>1</sub> ] ]
- c. **Pseudo-clefting**  
[ What<sub>1</sub> they said [ Fiona had eaten \_\_\_<sub>1</sub> ] ] was an apple.
- d. **Negative-NP extraction**  
[ No such apple ]<sub>1</sub> did they (ever) say [ Fiona had (ever?) eaten \_\_\_<sub>1</sub> ].
- e. **Comparative extraction**  
Alex ate more apples [ than (what)<sub>1</sub> they said [ Fiona had eaten \_\_\_<sub>1</sub> ] ].
- f. **Exclamatory extraction**  
[ What a lovely apple ]<sub>1</sub> they said [ Fiona had eaten \_\_\_<sub>1</sub> ]!

<sup>3</sup> Note that *A*-extractions are *not*  $\bar{A}$ -movement.

#### (3) *B*-extractions

- a. **Topicalization**  
Fiona<sub>1</sub>, they said [ \_\_\_<sub>1</sub> had eaten an apple ].
- b. **Nonrestrictive-relative extraction**  
Fiona, who<sub>1</sub> they said [ \_\_\_<sub>1</sub> had eaten an apple ], bought some kumquats.
- c. **Clefting**  
It was Fiona [ who<sub>1</sub> they said [ \_\_\_<sub>1</sub> had eaten an apple ] ].

- A-extractions and B-extractions are differentiated by certain positions that allow A-extractions, but not B-extractions; to be discussed below.

\* **Postal's analysis in a nutshell**

- The positions that allow A-extractions but not B-extractions also prohibit pronouns; they are ANTIPRONOMINAL.
- B-extractions obligatorily leave invisible resumptive pronouns, but A-extractions do not.<sup>4</sup>
- Thus, B-extractions are incompatible with antipronominal positions because they leave behind a pronoun.

<sup>4</sup> Specifically, A-extractions can, but do not *have* to, leave invisible resumptives.

## 2 Differences between A-extractions and B-extractions<sup>5</sup>

<sup>5</sup> The presentation of the data in this section more closely follows Poole (2017:13–31). This takes a subset of the data as representative.

### 2.1 Existential constructions

- \* The pivot of an existential construction can be targeted by A-extractions, but not B-extractions:

(4) a. **Baseline**

There is **a potato** in the pantry.

b. **Wh-movement**

**What**<sub>1</sub> is there \_\_\_<sub>1</sub> in the pantry?

c. **Topicalization**

\*[ **A potato** ]<sub>1</sub>, there is \_\_\_<sub>1</sub> in the pantry.

d. **Restrictive RC**

Gloria saw the **potatoes**<sub>1</sub> [<sub>RC</sub> that there were \_\_\_<sub>1</sub> in the pantry ].

e. **Appositive RC**

\*Gloria saw the **potatoes**<sub>1</sub>, [<sub>RC</sub> which there were \_\_\_<sub>1</sub> in the pantry ].

f. **Tough-construction**

i. \*[ **A potato** ]<sub>1</sub> was impossible [ for there to be \_\_\_<sub>1</sub> in the pantry ].

ii. It was impossible [ for there to be **a potato** in the pantry ].

- **Topicalization vs. focus movement**

In working on Poole (2017), I spent a lot of time worrying about topicalization vs. focus movement (vs. Y-movement). Part of this involved devising contexts that force topicalization:

(5) **Topicalization cannot target the pivot**

Context: Gloria is making a salad for lunch at her friend's house, but does not know where everything is located in the kitchen.

A. What about a knife and a cutting board?

Where can I find *those*?

B. \*[ A cutting BOARD ]<sub>CT</sub> . . . there is [ on the TABLE ]<sub>Exh</sub>.

(6) **Topicalization can target the coda**

Context: Gloria is helping her friend reorganize their kitchen. Before entering the messy kitchen, she wants to start by taking an inventory of what is on all of the surfaces.

A. What about on the table and on the counter?

What is there on *those*?

B. ✓ [ On the TABLE ]<sub>CT</sub> . . . there is [ a cutting BOARD ]<sub>Exh</sub>.

- Note that copula constructions do not distinguish A-extractions and B-extractions:

(7) a. **Baseline**

Gloria said (that) **a potato** was in the pantry.

b. **Wh-movement**

**What**<sub>1</sub> did Gloria say \_\_\_<sub>1</sub> was in the pantry?

c. **Topicalization**

[ **A potato** ]<sub>1</sub>, Gloria said \_\_\_<sub>1</sub> was in the pantry.

d. **Restrictive RC**

Gloria saw the **potatoes**<sub>1</sub> [RC that \_\_\_<sub>1</sub> were in the pantry ].

e. **Appositive RC**

Gloria saw the **potatoes**<sub>1</sub>, [RC which \_\_\_<sub>1</sub> were in the pantry ].

## 2.2 Change-of-color verbs

- \* The color term of a change-of-color verb can be targeted by A-extractions, but not B-extractions:<sup>6</sup>

<sup>6</sup> Other verbs: *turn* and *dye*.

(8) a. **Baseline**

Megan painted the house **magenta**.

b. **Wh-movement**

[ **What color** ]<sub>1</sub> did Megan paint the house \_\_\_<sub>1</sub>?

c. **Topicalization**

\***Magenta**<sub>1</sub>, Megan painted the house \_\_\_<sub>1</sub>.

d. **Restrictive RC**

Jyoti liked the **color**<sub>1</sub> [RC that Megan had painted the house \_\_\_<sub>1</sub> ].

e. **Appositive RC**

\*Jyoti liked that **color**<sub>1</sub>, [RC which Megan had painted the house \_\_\_<sub>1</sub> ].

f. **Tough-construction**

i. \***Magenta**<sub>1</sub> was fun [ (for Megan) to paint the house \_\_\_<sub>1</sub> ].

ii. It was fun [ (for Megan) to paint the house **magenta** ].

- There is no general prohibition on B-extractions targeting color terms:

(9) a. { **Green / that color** }<sub>1</sub>, he never discussed \_\_\_<sub>1</sub> with me. [Postal 1994:164]

b. He never discussed { **green / that color** }<sub>1</sub> with me, [RC which \_\_\_<sub>1</sub> is his favorite color ].

- An interesting contrast between negative extraction and topicalization from Postal (1994:164):

- (10) a. [ **No such color** ]<sub>1</sub> would I ever paint my car \_\_\_\_<sub>1</sub>.  
 b. \* [ **That color** ]<sub>1</sub>, he never painted the cart \_\_\_\_<sub>1</sub>

### 2.3 Naming verbs

- \* The name argument of a naming verb can be targeted by A-extractions, but not B-extractions:<sup>7</sup>

<sup>7</sup> Other verbs: *name* and *baptize*.

- (11) a. **Baseline**  
 Irene called the cat **Snowflake**.
- b. **Wh-movement**  
 [ **What name** ]<sub>1</sub> did Irene call the cat \_\_\_\_<sub>1</sub>?
- c. **Topicalization**  
 \***Snowflake**<sub>1</sub>, Irene called the cat \_\_\_\_<sub>1</sub>.
- d. **Restrictive RC**  
 Helen disliked the **nickname**<sub>1</sub> [RC that Irene always called the cat \_\_\_\_<sub>1</sub> ].
- e. **Appositive RC**  
 \*Helen disliked that **nickname**<sub>1</sub>, [RC which Irene always called the cat \_\_\_\_<sub>1</sub> ].
- f. **Tough-construction**
- i. \***Snowflake**<sub>1</sub> was fun [ (for Irene) to call the cat \_\_\_\_<sub>1</sub> ].
- ii. It was fun [ (for Irene) to call the cat **Snowflake** ].

- There is no general prohibition on B-extractions targeting names:

- (12) a. **Raphael**<sub>1</sub>, we never discussed \_\_\_\_<sub>1</sub> as a possible name for him.  
 [Postal 1994:164]
- b. We never discussed **Raphael**<sub>1</sub> as a possible name for him, [RC which \_\_\_\_<sub>1</sub> is my favorite name ].

### 2.4 Predicate nominals

- \* Predicate nominals can be targeted by A-extractions, but not B-extractions:

- (13) a. **Baseline**  
 Erika became a **teacher**.
- b. **Wh-movement**  
 [ **What (kind of teacher)** ]<sub>1</sub> did Erika become \_\_\_\_<sub>1</sub>?
- c. **Topicalization**  
 \* [ **A math teacher** ]<sub>1</sub>, Erika became \_\_\_\_<sub>1</sub>.
- d. **Restrictive RC**  
 Georgia liked the **kind of teacher**<sub>1</sub> [RC that Erika had become \_\_\_\_<sub>1</sub> ].
- e. **Appositive RC**  
 \*Georgia liked that **kind of teacher**<sub>1</sub>, [RC which Erika had become \_\_\_\_<sub>1</sub> ].

f. **Tough-construction**

- i. \* [ **A teacher** ]<sub>1</sub> was tough [ (for Erika) to become \_\_\_\_<sub>1</sub> ].
- ii. It was tough [ (for Erika) to become **a teacher** ].

• **Predicate-nominal environments**

- (14) a. Frank is **a bodyguard**.
- b. I regarded Frank as **a bodyguard**.
- c. Frank became **a bodyguard**.
- d. Frank turned into **a bodyguard**.
- e. They made **a bodyguard** out of Frank.
- f. Italians make **good cannibal snacks**.<sup>8</sup>

[Postal 1994:165]

<sup>8</sup> On the 'are' reading, not the 'manufacture' reading.

## 2.5 Other environments

- Postal (1994) identifies several other positions that allow A-extraction gaps but not B-extraction gaps, though, in my opinion, the data are not a clear for them:<sup>9</sup>
  - Inalienable possession contexts
  - Adverbial NPs
  - Extraposed prepositional phrases
  - Infinitival extraposition
  - Exceptive shifting
  - Temporal NPs
  - Idiomatic verb + NP structures
  - *born in X*, where X is a country/state/city.

<sup>9</sup> And I have never known what to make of the various rightwards cases.

## 3 Antipronominality

\* Postal argues that what unifies these positions is that they prohibit pronouns:

- (15) a. **Existential constructions**  
\*Gloria bought *a potato*, and there is **it** in the pantry.
- b. **Change-of-color verbs**  
\*Megan liked *the color magenta*, and she painted the house **it**.
- c. **Naming verbs**  
\*Irene liked *the name Snowflake*, and she called the cat **it**.
- d. **Predicate nominals**  
\*Erika wanted to become *a teacher*, and she became **it**.

⇒ Thus, he calls these positions ANTIPRONOMINAL CONTEXTS (APCs).

- English has a general ban on DP+pronoun structures, but APCs cannot be reduced to this ban, because antipronominality persists even when the potentially illicit word order has been changed (e.g. in a passive):

- (16) a. \*They gave [DP Ted] [PRN it].  
 b. [DP Ted] was given [PRN it].
- (17) a. \*He painted [DP his car] [PRN it].  
 b. \*[DP His car] was painted [PRN it].

## 4 Postal's analysis


### • *Interim summary*

- A large collection of English environments E can contain A-extraction gaps, but not B-extraction gaps.
- Each member of E is an antipronominal context.
- No attested environments allow B-extraction gaps, but not A-extraction gaps.

### 4.1 B-extractions leave a resumptive

#### \* *Core idea*

- B-extractions obligatorily leave resumptive pronouns (RPs) in the gap site.<sup>10</sup> <sup>10</sup> See also Cinque (1990).
- Thus, B-extraction gaps are banned from APCs because those gaps actually represent pronouns:

(18) \* [ A potato ], there is [APC RP ] in the pantry.  

 A horizontal line with an upward-pointing arrow at its left end and a downward-pointing arrow at its right end, positioned below the text. The line spans from the start of 'A potato' to the start of 'there is'. Below the line is the label 'B-extraction'.

#### • *Invisible RPs*

Crucially, the RPs with B-extractions are obligatorily silent, unlike canonical RPs:

#### (19) **Resumptives in B-extraction gaps**

- a. **Topicalization**<sup>11</sup>  
 \*Fiona<sub>1</sub>, they said [ **she**<sub>1</sub> had eaten an apple ].
- b. **Nonrestrictive-relative extraction**  
 \*Fiona, who<sub>1</sub> they said [ **she**<sub>1</sub> had eaten an apple ], bought some kumquats.
- c. **Clefting**  
 \*It was Fiona [ who<sub>1</sub> they said [ **she**<sub>1</sub> had eaten an apple ] ].

<sup>11</sup> This sentence is okay as left dislocation (i.e. with a different prosody).

#### (20) **Canonical resumptives in English**

the apples in the fridge [ Op<sub>1</sub> that nobody knew where { ?**they**<sub>1</sub> / \* \_\_\_<sub>1</sub> } came from.

#### • *Comparison to Ross's (1967) framework*

- Ross divides transformations into **CHOPPING RULES** (create gaps) and **COPYING RULES** (leave behind pronominal traces, i.e. RPs).
- Chopping rules are sensitive to island constraints, while copying rules freely violate them.
- Nothing in Ross's framework corresponds to the A/B-extraction distinction.

- Postal has some discussion of the issue of island sensitivity (section 4.3). He proposes that B-extractions may in fact involve A-extraction of the RP itself, the RP-movement being island-sensitive:<sup>12</sup>

<sup>12</sup> I admit to never quite understanding this proposal.

(21) **Components of English topicalization**

- Extraction of the binder (extractee)
- Presence of an RP in the same role as the binder
- Extraction of the RP, possibly to the same point as the binder
- Control of the extracted RP by the binder

## 4.2 Selective islands

- Postal observes that both A-extractions and B-extractions cannot target APCs that are embedded inside selective islands:<sup>13</sup>

<sup>13</sup> Also called WEAK ISLANDS.

(22) **Existential constructions**

- \*[ **How many books** ]<sub>1</sub> do you wonder [ whether there are \_\_\_<sub>1</sub> on the table ]?
- ?[ **Which table** ]<sub>1</sub> do you wonder [ whether there are books on \_\_\_<sub>1</sub> ]?

(23) **Change-of-color verbs**

- \*[ **Which color** ]<sub>1</sub> do you wonder [ whether Nina painted the house \_\_\_<sub>1</sub> ]?
- ?[ **Which house** ]<sub>1</sub> do you wonder [ whether Nina painted \_\_\_<sub>1</sub> that ugly green ]?

(24) **Naming verbs**

- \*[ **Which nickname** ]<sub>1</sub> do you wonder [ whether Nina calls the cat \_\_\_<sub>1</sub> ]?
- ?[ **Which cat** ]<sub>1</sub> do you wonder [ whether Nina calls \_\_\_<sub>1</sub> Garfield ]?

(25) **Predicate nominals**

- \*[ **Which kind of teacher** ]<sub>1</sub> do you wonder  
[ whether Nina made \_\_\_<sub>1</sub> out of Mary ]?
- ?[ **Which student** ]<sub>1</sub> do you wonder  
[ whether Nina made a math teacher out of \_\_\_<sub>1</sub> ]?

⇒ Selective islands neutralize the distinction between A-extractions and B-extractions.

\* **Postal's analysis**

- Selective islands are just islands. Like Ross (1967) argued, island constraints can only be violated with RPs.
- Thus, all extraction from (selective) islands requires a RP.
- Thus, all extraction from (selective) islands cannot target APCs.

- **Final movement typology**

- (26) a. B-EXTRACTIONS: require RPs in their gap sites  
b. A1-EXTRACTIONS: allow RPs in their gaps sites  
c. A2-EXTRACTIONS: forbid RPs in their gaps sites

- Under this framework, A-extractions must be divided into two types because some A-extraction types (e.g. free-relative formation) can never target positions inside selective islands, regardless of whether they are APCs or not.

## 5 Some problems

### 5.1 Wide vs. narrow APCs

- **Problem**

Not all environments that prohibit pronouns prohibit B-extraction gaps:

- (27) a. \*Katie attends Yale<sub>1</sub>, but Amanda does not attend **it**<sub>1</sub>.  
b. \*Katie attends Yale<sub>1</sub>, but Amanda wouldn't even apply to **it**<sub>1</sub>.  
[Postal 1994:176]
- (28) a. **Yale**<sub>1</sub>, Katie would never apply to \_\_\_\_<sub>1</sub>.  
b. It was Yale that Katie refused to attend \_\_\_\_\_. [Postal 1994:176]

- **Postal's solution**

Divide APCs into two types:

- NARROW PRONOMINAL BANS: Bans visible pronouns.
- WIDE PRONOMINAL BANS: Bans both visible and invisible pronouns.
- B-extraction gaps are only prohibited in wide antipronominal contexts.

### 5.2 Weak vs. strong pronouns

- **Problem**

Wide antipronominal contexts in fact allow some pronouns:

- (29) a. It was **her** that they hired  
b. It was **that** that they believed. [Postal 1994:177f]

- **Postal's solution**

Wide antipronominal contexts only exclude “weak” definite pronouns, which include (only?) *it* and RPs.



### 5.3 Properties of the extracted element

- **Problem**

A-extractions are prohibited in wide antipronominal contexts if they are genitives:

(30) a. \* [ **Whose drink** ]<sub>1</sub> is there \_\_\_\_<sub>1</sub> on the table?

b. \* the doctor [ **whose favorite color** ]<sub>1</sub> we painted the cabin \_\_\_\_<sub>1</sub>

- **Postal's solution**<sup>14</sup>

Moving a genitive is a type of B-extraction.

<sup>14</sup> If I understand correctly ...

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