# Before and after the noun: <br> Demonstratives and possessives in Spanish 

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## Poss and Dem in Spanish

## Before the noun

(1) a. su libro

3SG.POSS book
b. ese libro

DEM.MED book

## Poss and Dem in Spanish

Before the noun
(1) a. $\begin{array}{lll}\text { su libro } \\ & \text { 3SG.POSS book }\end{array}$
b. ese libro
DEM.MED book

## After the noun

b. el libro ese

DEF book DEM.MED

## Claims

## Claims

## 1. Postnominal Dem / Poss are indexed adjectives

## Claims

## 1. Postnominal Dem / Poss are indexed adjectives

2. Anti-uniqueness is a by-product of restrictive modification

## Outline

Introduction

Before the noun

After the noun
Claim I: Indexed Adjectives are a thing
Possessives
Demonstratives
Claim II: Anti-uniqueness comes from restrictivity

Conclusion

## Before the nouns

## Before the noun: Analysis

(3) Prenominal Demonstrative


## Before the noun: Analysis



## Before the noun: Analysis

(5) Prenominal Demonstrative


$$
\begin{aligned}
& \llbracket D_{\text {Dem }} \rrbracket= \\
& \lambda P_{<e, t\rangle} \cdot \underline{\lambda Q_{\langle e, t>} . u x[P(x) \wedge Q(x)]} .
\end{aligned}
$$

Elbourne (2008), Schwarz (2009), Šimík (2014), Ahn (2022), Jenks \& Konate (2022)

## Before the noun: Analysis

(5) Prenominal Demonstrative


$$
\begin{aligned}
& \llbracket D_{e m P} \rrbracket=[\lambda x \cdot x=g(1)] \\
& \mathbb{U} R_{\text {Dem }} \rrbracket=[\lambda y \cdot \lambda x \cdot x=y] \\
& \llbracket D_{\text {Dem }} \rrbracket= \\
& \lambda P_{<e, t\rangle} \cdot \lambda Q_{<e, t\rangle} \cdot \iota x[P(x) \wedge Q(x)]
\end{aligned}
$$

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(5) Prenominal Demonstrative


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& \llbracket D_{D e m} \rrbracket= \\
& \lambda P_{<e, t\rangle} . \lambda Q_{<e, t>} . \iota x[P(x) \wedge Q(x)]
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## Before the noun: Analysis

(6) Prenominal Possessive


$$
\begin{aligned}
& \llbracket D_{\text {Poss }} \rrbracket= \\
& \lambda P_{<e, t>} . \lambda Q_{<e, t>} . l x[P(x) \wedge Q(x)]
\end{aligned}
$$

Partee \& Borschev (2003), Simonenko \& Carlier (2022)

## Before the noun: Analysis

(6) Prenominal Possessive


$$
\begin{aligned}
& \llbracket \operatorname{Poss} P \rrbracket=\lambda x \cdot \operatorname{Poss}(x, g(1)) \\
& \llbracket R_{\text {Poss }} \rrbracket=\lambda y \cdot \lambda x \cdot \operatorname{Poss}(x, y)
\end{aligned}
$$

$$
\llbracket D_{\text {Poss }} \rrbracket=
$$

$$
\lambda P_{<e, t>} \cdot \lambda Q_{<e, t>} . \iota x[P(x) \wedge Q(x)]
$$

Partee \& Borschev (2003), Simonenko \& Carlier (2022)

## Before the noun: Analysis

(6) Prenominal Possessive

$\llbracket D P_{\text {Poss }} \rrbracket=\iota x[\operatorname{book}(x) \wedge \operatorname{Poss}(x, g(1))]$
$\llbracket \operatorname{Poss} P \rrbracket=\lambda x . \operatorname{Poss}(x, g(1))$
$\llbracket R_{\text {Poss }} \rrbracket=\lambda y \cdot \lambda x \cdot \operatorname{Poss}(x, y)$
$\llbracket D_{\text {Poss }} \rrbracket=$
$\lambda P_{<e, t>} . \underline{\lambda<e, t>}{ }^{. \iota x}[P(x) \wedge \underline{Q(x)}]$

Partee \& Borschev (2003), Simonenko \& Carlier (2022)

## Analysis: Motivation

- do not co-occur with articles $\rightarrow$ spell out $D$
(7) Prenominals



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- do not co-occur with articles $\rightarrow$ spell out D
(7) Prenominals

- denote an individual, presuppose (some kind of) uniqueness
$\rightarrow \iota$


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- do not co-occur with articles $\rightarrow$ spell out D
(7) Prenominals



## Analysis: Motivation

- do not co-occur with articles $\rightarrow$ spell out D
- denote an individual, presuppose (some kind of) uniqueness $\rightarrow \iota$
- context-dependent, need salient antecedent
$\rightarrow$ index
- difference between Poss and Dem $\rightarrow R$ head
- $\mathrm{R}_{\text {Dem }} \rightarrow$ identity
- $\mathrm{R}_{\text {Poss }} \rightarrow$ possession


## After the noun

Claim I: Indexed Adjectives are a thing

## After the noun: Analysis

(8) Postnominal Demonstrative

(9) Postnominal Possessive


## After the noun: Analysis

(8) Postnominal Demonstrative

libro $R_{\text {Dem }} 1$
(9) Postnominal Possessive


## After the noun: Analysis

(10) Postnominal Dem.


$$
\llbracket \operatorname{DemP} \mathbb{} \rrbracket=[\lambda x \cdot x=g(1)]
$$

## After the noun: Analysis

(10) Postnominal Dem.


$$
\begin{equation*}
\llbracket N P \rrbracket=[\lambda x \cdot \operatorname{book}(x) \wedge x=g(1)] \tag{PM}
\end{equation*}
$$

$\llbracket \operatorname{DemP} \rrbracket=[\lambda x \cdot x=g(1)]$

## After the noun: Analysis

(10) Postnominal Dem.

$\llbracket D P \rrbracket=\iota x[\operatorname{book}(x) \wedge x=g(1)]$
$\llbracket N P \rrbracket=[\lambda x \cdot \operatorname{book}(x) \wedge x=g(1)]$
$\llbracket \operatorname{DemP} \rrbracket=[\lambda x \cdot x=g(1)]$

## After the noun: Analysis

(11) Postnominal Poss.


$$
\llbracket \operatorname{Poss} P \rrbracket=[\lambda x . \operatorname{Poss}(x, g(1))]
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\llbracket \operatorname{Poss} P \rrbracket=[\lambda x \cdot \operatorname{Poss}(x, g(1))]
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Possessives

## Possessives as indexed adjectives

- follow the noun, like other modifiers
(12) El cuadro redondo suyo es bonito DEF painting round POSS is pretty 'Her round painting is pretty.'


## Possessives as indexed adjectives

- follow the noun, like other modifiers
(12) El cuadro redondo suyo es bonito DEF painting round POSS is pretty
'Her round painting is pretty.'
- in combination with definite and indefinite articles (NB: not definite/ $\iota$ )
(13) Conocí a un amigo suyo.
I.met DOM INDF friend POSS
'I met a friend of his.'


## Possessives as indexed adjectives

- NP-internal movement like other modifiers, considering
- adjective hierarchy
- focus (new information last)
- RC last
(14) un libro suyo [AdjP rojo ] [PP de sintaxis ] [CP que vi en Italia ] a book POSS red of syntax that I.saw in Italy


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## Possessives as indexed adjectives

- NP-internal movement like other modifiers, considering
- adjective hierarchy
- focus (new information last)
- RC last
(14) *un libro [AdjP rojo ] [PP de sintaxis ] [CP que vi en Italia ] suyo a book red of syntax that I.saw in Italy poss
- appear in predicatve position (without an article, like adjectives)
(15) Ese libro es alemán. that book is German
(16) Ese libro es suyo ... ese también that book is POSS that too 'That book is hers ... that one too.'
(17) \#Ese libro es el suyo ... ese también that book is DEF POSS hat too That book is hers ... that one too.


## Demonstratives

## Demonstratives as indexed adjectives

- follow the noun, like other modifiers
- they move in the NP


## Demonstratives as indexed adjectives

- follow the noun, like other modifiers
- they move in the NP
(18) el cuadro ese [AdjP redondo] [pp con flores ] [cp que vimos DEF painting DEM round with flowers that we.saw ].
'that round painting with flowers that we saw'


## Demonstratives as indexed adjectives

- follow the noun, like other modifiers
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## Demonstratives as indexed adjectives

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(18) el cuadro [Adjp redondo] [pp with flowers] ese [cP que vimos DEF painting round with flowers DEM that we.saw ].
'that round painting with flowers that we saw'


## Demonstratives as indexed adjectives

- follow the noun, like other modifiers
- they move in the NP
(18) *el cuadro [AdjP redondo] [PP de Picasso] [CP que vimos ] ese. def painting round by Picasso that we.saw DEM 'that round painting by Picasso we saw'


## Demonstratives as indexed adjectives

- they co-occur with articles. . . but only the definite! (unlike Poss)
(19) *Un / el libro ese INDF / DEF book DEM
(20) Un / el libro suyo INDF / DEF book POSS
- this is actually expected!


## Demonstratives as indexed adjectives

(21) $\llbracket[N P$ libro ese $] \rrbracket^{g}=\{x \mid \operatorname{book}(x) \wedge x=g(1)\}$
(22) $\mid \llbracket\left[{ }_{N p}\right.$ libro ese $] \mathbb{l}^{g} \mid=1$

- Maximize Presupposition forces use of the definite


## Demonstratives as indexed adjectives

- Maximize Presupposition forces insertion of the definite


## Demonstratives as indexed adjectives

- Maximize Presupposition forces insertion of the definite
(23) $\quad \mid \llbracket[N P$ highest mountain $] \rrbracket \mid=1 \quad X$ a $/ \checkmark$ the


## Demonstratives as indexed adjectives

- Maximize Presupposition forces insertion of the definite
(23) $\quad \mid \llbracket[N P$ highest mountain $] \rrbracket \mid=1$
$x$ a / / the
(24) $\mid \llbracket[N P$ weight of the tent $] \rrbracket \mid=1$
$x$ a / $\sqrt{ }$ the


## Demonstratives as indexed adjectives

- Maximize Presupposition forces insertion of the definite
(23) $\quad \mid \llbracket[N P$ highest mountain $] \rrbracket \mid=1$
$x$ a / / the
(24) $\mid \llbracket[N P$ weight of the tent $] \rrbracket \mid=1$
(25) $\quad \mid \llbracket[N P$ libro ese $] \rrbracket \mid=1$
$x$ a / $\checkmark$ the
$x$ a / $\checkmark$ the


## Summary

1. Postnominal Dem / Poss are indexed adjectives

- follow the noun
- scramble like adjectives
- combine with the right determiners
- intersective meaning feasible

After the noun
Claim II: Anti-uniqueness as a by-product of restrictive modification

## Anti-uniqueness

(26) \#That sun
anti-uniqueness requirement
$|P|>1$

## Anti-uniqueness

(26) \#That sun
anti-uniqueness requirement

$$
|P|>1
$$

anti-uniqueness inference


## Restrictive modification and anti-uniqueness

1. 【 book of syntax 】 $\llbracket$ book $\rrbracket$
$\rightsquigarrow$ there is more than one book
Pinon (2005), Cabredo-Hofherr (2014), Martin (2013)

## Restrictive modification and anti－uniqueness

1．【 book of syntax 】 $\llbracket$ book $\rrbracket$
$\rightsquigarrow$ there is more than one book
Pinon（2005），Cabredo－Hofherr（2014）， Martin（2013）
－Recursion
2．【book of syntax red $\rrbracket \subset \llbracket$ book of syntax $\rrbracket$
$\rightsquigarrow$ there is more than one syntax book

## Demonstratives as restrictive modifiers

- Dems also participate in restrictive modification
(27) $\llbracket$ that book 』 $\llbracket$ book 】
$\rightsquigarrow$ there is more than one book
Anti-Uniqueness!


## Demonstratives as restrictive modifiers

－Dems also participate in restrictive modification
（27）$\llbracket$ that book $\rrbracket \subset \llbracket$ book 】
$\rightsquigarrow$ there is more than one book
－Last element of the recursive rule
1．【book of syntax 】 $\llbracket$ book 】
2．$\llbracket$ that book of syntax $\rrbracket \subset \llbracket$ book of syntax $\rrbracket$
$\rightsquigarrow$ there is more than one syntax book

## Evidence from ellipsis

$$
[e]=\text { book of }
$$

(28) [Ese libro de sintaxis] es mejor que [ese e] syntax that book of syntax is better than that one
? That syntax book is better than that one


## Evidence from ellipsis

$$
[e]=\text { book of }
$$

（28）［Ese libro de sintaxis］es mejor que［ese e］ syntax that book of syntax is better than that one
？ That syntax book is better than that one


【that book of syntax 』 $\llbracket$ book of syntax 】
$\rightsquigarrow$ there is more than one syntax book

## Evidence from ellipsis

(29) [El libro de sintaxis ese] es mejor que [ese e] the book of syntax that is better than that That syntax book is better than that one


## Evidence from ellipsis

（29）［El libro de sintaxis ese］es mejor que［ese e］ the book of syntax that is better than that That syntax book is better than that one


【 book of syntax that】】 【 book of syntax 】
$\rightsquigarrow$ there is more than one syntax book
［e］＝book of syntax


## Evidence from ellipsis

[El libro ese de sintaxis] es mejor que [ese e] [e] = book the book that of syntax is better than that That syntax book is better than that one


## Evidence from ellipsis

(30) [El libro ese de sintaxis] es mejor que [ese e]
$[\mathrm{e}]=$ book the book that of syntax is better than that That syntax book is better than that one

## Evidence from ellipsis

[El libro ese de sintaxis] es mejor que [ese e]
[e] $=$ book the book that of syntax is better than that That syntax book is better than that one

- $X \llbracket$ book that of syntax $\rrbracket \subset \llbracket$ book that 』- | 【 book that of syntax $\rrbracket \mid=1$
- $\checkmark \llbracket$ book that of syntax $\rrbracket=\llbracket$ book that $\rrbracket$
$\psi \rightarrow$ there is more than one syntax book


## Evidence from ellipsis

［El libro ese de sintaxis］es mejor que［ese e］
［e］$=$ book the book that of syntax is better than that That syntax book is better than that one

- $X \llbracket$ book that of syntax $\rrbracket \subset \llbracket$ book that 』
- ｜【book that of syntax 』｜＝1
－$\checkmark \llbracket$ book that of syntax $\rrbracket=\llbracket$ book that $\rrbracket$
$\psi \rightarrow$ there is more than one syntax book

No anti－uniqueness inference！

Conclusion

## Conclusion

## 1. Postnominal Dem / Poss are indexed adjectives

2. Anti-uniqueness is a by-product of restrictive modification

## Conclusion

## 1. Postnominal Dem / Poss are indexed adjectives

- Dems aren't only Ds, but can be captured with usual mechanisms

2. Anti-uniqueness is a by-product of restrictive modification

## Conclusion

## 1. Postnominal Dem / Poss are indexed adjectives

- Dems aren't only Ds, but can be captured with usual mechanisms

2. Anti-uniqueness is a by-product of restrictive modification

- Contribution of indexed adjectives to study of Dems

