

Before and after the noun: Semantics for Spanish demonstratives

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Abstract

Spanish demonstratives may appear before the noun (*este libro* ‘this book’) or after the noun (*el libro este* ‘the book this’). Despite their relevance for comparative syntax (Giusti 1997, 2015; Brugè 1996, 2002), little work has been done on their meaning. Based on elicitation data, this paper proposes the first formal semantic treatment of the two Spanish constructions, with a particular focus on the lesser studied postnominal demonstrative. The main proposal is that the postnominal is an indexed adjective, i.e. an adjective carrying a “silent pronoun”. Additionally, it is argued that the postnominal is a weak demonstrative, unlike its prenominal counterpart. These two points capture previously unexplained differences between the two constructions, as well as another (better understood) alternation in Spanish, namely pre- and postnominal possessives. The paper contributes to the cross-linguistic study of demonstratives by examining an atypical adjectival demonstrative from a semantic lens.

Keywords: demonstratives, DP, semantics, indices, possessives, Spanish

1. Introduction

Spanish demonstratives have played a central role in the mapping of DP structure. This is because they may appear before the noun, as in (1), or after the noun, as in (2), providing evidence of different roles demonstratives may perform in the noun phrase (Giusti 1997, 2015, Brugè 2002).

(1) *Prenominal demonstrative*

este	/	ese	/	aquel	destornillador
DEM.PROX		DEM.MED		DEM.DIST	screwdriver
‘this/that screwdriver’					

(2) *Postnominal demonstrative*

el	destornillador	este	/	ese	/	aquel
DEF	screwdriver	DEM.PROX		DEM.MED		DEM.DIST
‘this/that screwdriver’						

Despite their relevance for comparative syntax, the semantics of (1) and (2) remains unexplored. Addressing this gap, this paper proposes the first formal semantic analysis of these constructions, with a focus on the lesser studied (and less canonical) postnominal demonstrative. The

main proposal is that the postnominal is an indexed adjective, i.e. an adjective carrying a “silent pronoun”. The proposed semantics go a long way in explaining some peculiarities of the construction, which had only received tentative explanations in the previous literature. In a second part of the paper, I explore the hypothesis that the postnominal is a weak demonstrative that cannot be focused, and tie its reduced availability in deixis to this property. These ingredients capture the differences between the two demonstrative constructions, as well as the similarities and differences with another (better understood) alternation in Spanish – pre- and postnominal possessives.

Another goal of the paper is to present systematically collected data on the Spanish demonstratives, whose formal description has mostly been based on linguists’ introspective judgments. Unless stated otherwise, the judgments presented in this paper come from interviews with 8 native speakers of Peninsular Spanish. The questionnaire used in these interviews, which can be found in the Appendix, consisted mainly of felicity and truth-value judgments in context (Matthewson 2004, Bochnak & Matthewson 2020). The full interview notes, including speakers’ comments, can be accessed in an online repository [*link will be provided here*]; speakers’ judgments will be provided alongside the examples in the text.

The paper is structured as follows. Section 2 provides a basic description of the two demonstratives and discusses the previous literature. Section 3 presents the analysis of the postnominal as an indexed adjective and the data supporting it. Section 4 examines the relation between the weakness of the postnominal and deixis. Section 5 compares the two demonstratives to Spanish possessives. After discussing theoretical and cross-linguistic implications, Section 6 briefly concludes.

2. Background

This section discusses the existing literature on the two demonstratives. After presenting their basic properties, we turn to previous syntactic accounts, which struggled to capture the elusive behaviour of the postnominal demonstrative.

2.1. Basic properties

Spanish has three demonstrative forms, proximal, medial and distal. All three inflect for gender and number (cf. Table 1) agreeing with other inflecting elements in the DP, and all of these forms may appear in both prenominal and postnominal position.

Table 1. Paradigm of Spanish demonstrative forms

	Singular		Plural	
	Masculine	Feminine	Masculine	Feminine
PROX	este	esta	estos	estas
MED	ese	esa	esos	esas
DIST	aquel	aquella	aquellos	aquellas

Broadly speaking, the prenominal series is similar to English demonstratives, as they are determiner-like and never co-occur with articles. In turn, postnominal demonstratives can be conceived as adjective-like, in that they co-occur with a determiner and occupy positions typical of restrictive modifiers in Spanish, i.e. following the noun. Example (3) shows a DP containing a postnominal demonstrative interspersed with other modifiers:

- (3) a. Det N Adj **Dem** PP RC

- b. la maceta verde esa [PP de Celia] [CP que admiraste ayer]
 the flowerpot green that of Celia COMP admired.2SG yesterday
 ‘that green flowerpot of Celia’s you admired yesterday’

According to Brugè (1996), (3) instantiates the basic DP word order, although there is some flexibility in the placement of modifiers (cf. Roca 1996:121ff). For example, (heavy) adjectives can follow the demonstrative and some PPs may precede it.

2.2. Issues in the previous literature

We now turn to the main challenges faced by previous analyses. We will focus on two unresolved issues surrounding the postnominal: a definiteness restriction and the possibility of deixis.

First, let me provide a quick survey of existing work. Spanish demonstratives have received attention in the syntactic literature (Roca 1996, 2009, Brugè 1996, 2002, Bernstein 2001, Taboada 2007), and in the pragmatic literature (Alexander 2007, Zulaica Hernández 2017). Despite their differing goals, both have ultimately addressed similar questions, namely: what are the differences between the two demonstratives, and how can they be captured? While the pragmatic literature focused on their discourse properties, the syntactic literature approached the question by derivationally relating the two constructions. In this respect, Brugè’s (1996, 2002) analysis has been particularly influential: adopting a cartographic approach (Cinque 1999, Cinque & Rizzi 2009), Brugè proposes that demonstratives (like other nominal modifiers), sit in the specifier of their own functional projection (DemP). In the postnominal construction, the demonstrative is in its base position, and the surface word order (DEF-N-DEM) is achieved via NP raising. By contrast, in the prenominal construction there is an additional movement of the demonstrative to the specifier of D. In a way, without spelling it out explicitly, Brugè formalises the observation that the postnominal is similar to a modifier (by treating it like other adjectives), and that the prenominal is determiner-like (by linking it to the D domain).

In this and other analyses, a recurrent problem was to provide a precise characterisation of the postnominal, which does not conform to traditional criteria for what constitutes a demonstrative. In this paper, we will focus on two particularly persistent issues in the literature. The first issue involves a definiteness restriction: the postnominal can be combined with the definite article, but not with the indefinite (Eguren 1999, Leonetti 1999).

- (4) **el** / ***un** tornillo **ese**
 the a screw that
 ‘that screw’

If the postnominal is a modifier, we would expect it to be compatible with both determiners, on par with other nominal adjuncts. Existing solutions to this issue vary, but they all share the idea that the postnominal has a special syntactic relation to D, for example by agreeing with D (Brugè 1996, 2002) or by forming a referential chain with D (Roca 1996). Roca (2009) even posits that the postnominal heads its own D_{topic} projection, abandoning the idea that it is a modifier. In general, the implicit assumption is that (4) can be subsumed under the phenomenon of ‘double definiteness’, where definiteness (conceived as a syntactic feature) is expressed more than once in the DP (Alexiadou 2014). While these explanations are viable, many are explicitly tentative and it is not clear why only demonstratives, and not other modifiers, should bear this special relation to D.

The second issue is more general and is related to deixis. Several analyses argue that the postnominal cannot be used in combination with pointing, which is unexpected if we are dealing with a demonstrative. The most explicit claim in this respect is Taboada (2007), who proposes that the demonstrative cannot be deictic, and who ties this behaviour to a negative setting of a deictic feature in syntax. Similarly, Roca (2009) sees the postnominal as predominantly anaphoric. However,

exophoric uses of the postnominal are attested, and Roca (2009:506, fn8) himself clarifies that pointing may sometimes be allowed. Thus, the intuition that the postnominal is not deictic requires clarification, both on the theoretical side (what is meant by deixis?) and on the empirical side (can the postnominal be used deictically, and if so when?).

In sum, the solutions to these two issues have been varied, but mostly tentative. Notably, while previous approaches were mostly syntactic, they appealed to notions at the interface with semantics – such as referentiality, deixis and definiteness. Taking seriously this idea, this paper tackles these issues based on recent advances in definiteness semantics.

3. The postnominal demonstrative as an indexed adjective

This section presents the analysis of the two demonstratives and the data supporting it. In the first part, it is argued that both demonstratives bear a pronominal index, but that they have different categorial status: while the pronominal is an “indexed definite”, the postnominal is an “indexed adjective”. It will be shown how several properties of the postnominal can be derived from the proposed semantics, including its definiteness restriction.

3.1. Background: Indices and indexed expressions

Since we treat demonstratives as “indexed” expressions, it is worth clarifying the notion of index and its role in semantic interpretation. In formal semantics, indices are standard devices to model the meaning of pronouns as opposed to other referring expressions. The introduction of indices is partly motivated by the observation that the way pronouns establish reference is different from that of other expressions. To illustrate, consider the sentence pair in (5):

- (5) (*Uttered in Spain in April 2025, when the president was Pedro Sánchez*)
a. **The president** gave a speech on the 3rd of March 2025.
b. **He**₁ [pointing at Pedro Sánchez] gave a speech on the 3rd of March 2025.
- (6) Pedro Sánchez gave a speech on the 3rd of March 2025.

Intuitively, both (5a) and (5b) express the proposition in (6): both are judged true if Pedro Sánchez gave a speech on the 3rd of March 2025. However, the way we arrive at these judgements is different in each case. For (5a), it is sufficient to know the state of affairs in the world – for instance, one could read in the newspaper that the president gave a speech. By contrast, in (5b) the hearer must know who was pointed at. Additionally, the referent of *he* (and therefore the truth of the sentence) varies depending on who the speaker is pointing at, whereas the referent of *the president* does not (pointing at someone who is not the president leads to infelicity, rather than a change of referent).

This behaviour is often captured by positing that pronouns are variables, whose reference is determined by the utterance context when they are free.¹ One way to model this is to provide them with a numerical index, whose interpretation is determined by a context-dependent assignment function, which maps indices onto contextually salient entities (Heim & Kratzer 1998). For instance, the sentence in (5b) could be interpreted relative to the assignment *g* in (7):

- (7) $g = [1 \rightarrow \text{Pedro Sánchez}, 2 \rightarrow \text{Mariano Rajoy}, 3 \rightarrow \text{Antonio Rivas}, \dots]$

By contrast, the role of context with definite descriptions is more limited. It is often assumed that its main task is to restrict the domain, i.e. limit the set of entities within which uniqueness is

¹ I set aside from this discussion *bound* uses of pronouns, which have had a less prominent position in the discussion of demonstratives (see Heim & Kratzer 1998: ch. 5).

evaluated. To illustrate with our example, *the president* in (5a) uniquely refers to Pedro Sánchez because we are evaluating the expression with respect to Spain, and not the entire world. One way of modeling this is to include a situation variable in the denotation of the definite (Heim 1990, Schwarz 2009, Elbourne 2013) – i.e., a variable over (salient) situations. On this account, the meaning of *the president* can be paraphrased as *the unique entity that is a president in (salient) situation s*. If *s* is contextually resolved to Spain, the DP yields the intended interpretation.

Equipped with this background, we can return to the analysis of demonstratives. It is generally agreed that demonstratives, like pronouns, have a special relation to context. In recent years, a significant body of literature has captured this context-dependence by incorporating an index into their structure and denotation (Elbourne 2008, Schwarz 2009, Simonenko 2014, Šimík 2016, a.o.). Thus, like pronouns and unlike definite descriptions, reference with demonstratives is directly mediated by a context-dependent assignment function.

In what follows, I will adopt an articulated version of this idea developed by Jenks & Konate (2022). On this account, the index is introduced via a category-neutral *idx* feature, which, combined with various category features, results in different types of “indexed” expressions:

- (8) a. [idx, D] \leftrightarrow *this, that*, other pronouns
 b. [idx, Adv] \leftrightarrow *so, thus*
 c. [idx, N] \leftrightarrow *one* (Jenks and Konate 2022:8)

Thus, demonstratives spell out a bundle of syntactic features; in addition to *idx* and D, they also include distality, person, and number features (9) – which will be assumed, but not included, in the remainder of the paper.

- (9) a. / *this* / \leftrightarrow [D, IDX, SG, PROX]
 b. / *those* / \leftrightarrow [D, IDX, PL]

In the next section, this system will be applied to the two Spanish constructions. I will propose a separate entry for each demonstrative, each with its own feature make-up. On the one hand, the prenominal demonstrative is an indexed definite (spelling out D and *idx*). On the other hand, the postnominal instantiates a category that Jenks & Konate do not contemplate: an indexed adjective, i.e. an adjective spelling out *idxP*.

3.2. Analysis and evidence

In a nutshell, both demonstratives include *idxP*, but they differ in the way it is introduced into the structure. The prenominal introduces it as an argument of D^x , whereas the postnominal introduces it as a property, like adjectives.

Prenominal demonstratives are canonical instances of what Jenks & Konate (2022) call “indexed definite”, a determiner with the structure and denotation in (10). They are, thus, very similar to English *this/that* (see also Schwarz 2009, Elbourne 2008, Simonenko 2014).

- (10) *Prenominal DEM*
 a. /*ese*/ \leftrightarrow [D, IDX, M, SG]
 b. [D^xP 1_{idxP} [D^x *ese NP*]]
 c. $\llbracket 1_{ese} \rrbracket = \lambda P . \lambda y . 1x [P(x) \ \& \ x = y]^2$
Presupposition: *there is exactly one salient individual that is a P and is identical to y/g(1)*

² In what follows, I will sometimes use a subscripted *ese_I* as a shorthand for the structure introduced by the demonstrative in (7b), even though, technically, the index is spelled out separately. Schwarz’s (2009) original entry and structure includes a situation variable, which I will not consider from here on.

I illustrate how this works based on *ese libro* (‘that book’) in Figure 1. Syntactically, *ese* spells out a complex D^x head (type $\langle\langle e, t \rangle, \langle e, e \rangle\rangle$), which takes two arguments (NP and $\text{id}xP$), and returns the unique individual with the NP-property that is identical to $g(I)$. In our example, D takes *libro* ‘book’ and $g(I)$ (the value of the assignment function for 1 – say *El Quijote*), and returns *El Quijote*. Further, $\text{id}xP$ introduces an antecedent requirement: *ese libro* is felicitous if and only if there is exactly one salient book antecedent, be it anaphoric (in previous discourse) or exophoric (in the utterance context).³

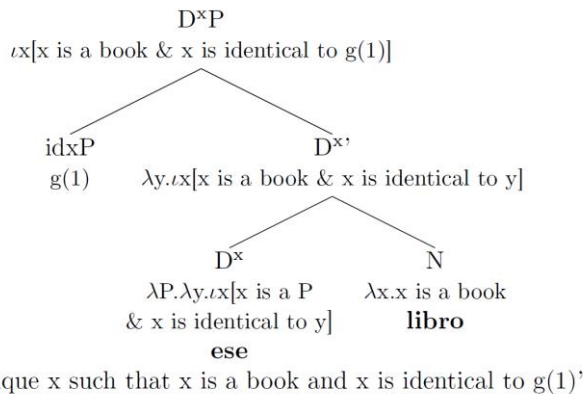


Figure 1. Prenominal demonstrative: Structure and derivation

(11) *Postnominal DEM*
 a. /ese/ \leftrightarrow [A, IDX, M, SG]
 b. $[[ese_I]]^g = g(1)$ or $[\lambda x. x = g(1)]$ (after the application of *Ident*)
 Presupposition: there is a salient antecedent in context

Applied to *el libro ese* ('the book that') in Figure 2, *ese* is first shifted from the individual $g(I)$ (say, *El Quijote*) to the property of being identical to $g(I)$ (i.e. of being identical to *El Quijote*). This property combines with *libro* 'book' via predicate modification, yielding the NP *libro ese* ('book that') – which denotes the property of being a book and being identical to $g(I)$. Finally, the definite *el* takes this NP as an argument and returns the unique book identical to $g(I)$ (i.e., the unique book identical

to *El Quijote* – namely, *El Quijote*). The expression is felicitous if there is indeed one book identical to a salient $g(1)$ antecedent.

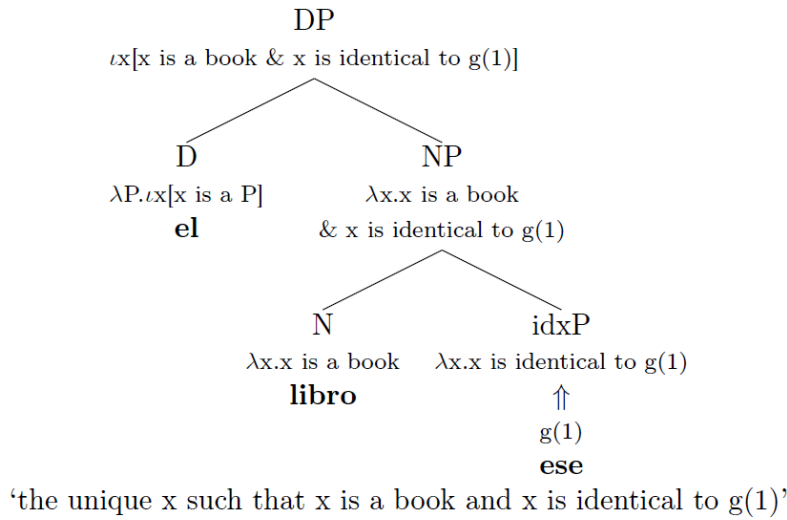


Figure 2. Postnominal demonstrative: Structure and derivation

Overall, although they differ in their internal composition, the two demonstrative constructions result in the same core semantics. This is a welcome result, considering their semantic similarities, to which we now turn.

3.2.1. The demonstratives are demonstratives: Evidence for an index

Treating both demonstratives as indexed expressions captures the fact that they require a context that supplies a salient antecedent (anaphoric or deictic), being excluded from contexts that do not supply one. This is of particular relevance for the postnominal, which has been argued to differ in its referential properties from the prenominal (in deixis, see Section 2.2). As we will see shortly, the postnominal still shows behaviour typically associated with demonstratives.

One context that excludes both demonstratives is the so-called “larger uniqueness use”, in which the DP refers to a (prototypically) unique entity: in (13), the president is unique in a country, licensing the definite in (13a), but he is not present in the utterance context, excluding the two demonstratives in (13b). The same sentence with the demonstratives is possible when an antecedent is provided, as in deixis, cf. (14), or in anaphora, cf. (15).

(13) *Larger uniqueness.* You arrive at a bus stop and see people discussing. You approach a stranger and ask what happened. He replies:

- a. **El presidente** ha dimitido.
 the president has resigned.
 ‘The president has resigned.’

(6/6)⁴

- b. # {**Ese / este presidente**} / # {**El presidente ese / este**} ha dimitido.
 that this president the president that this has resigned.
 ‘That/this president has resigned.’

(0/6) / (?1/6)

Comment: *I would ask “which one”? Unless they are pointing at an image.*

⁴ In what follows, I will indicate how many speakers accepted the sentence in context (speakers who accepted sentence / total speakers). ‘maybe’ judgments are marked with a superscripted ‘?’.

- (14) *Deixis*. In the last days there was a political scandal in a neighbouring country. At the bus stop, you see a stranger. He's carrying a newspaper with the picture of a political figure. You approach him and ask what happened. He replies, pointing at the photo:

{Este presidente} / {El presidente este} ha dimitido.
 this president the president this has resigned.
 'This president has resigned.' (5/5) / (4/5)

- (15) *Anaphora*. A stranger tells you the political facts of a foreign country: "A long time ago there were elections and there was a new president... there were many political scandals and..."

{Ese presidente} / {El presidente ese} tuvo que dimitir.
 that president the president that had COMP resign
 'That president had to resign.' (5/5) / (5/5)

Another context that provides uniqueness but no antecedent involves situation-based quantifiers. In (14), the definite DP is able to pick out distinct individuals in the situations quantified over, since each class will typically have one blackboard. By contrast, the demonstratives are not able to refer, since their antecedent presupposition is not met (there is no pre-mentioned blackboard).

- (16) A school inspector talking: "*Each time I went to a class...*"

{la pizarra} / # {esa pizarra} / # {la pizarra esa} estaba vacía."
 the blackboard that blackboard the blackboard that was empty
 'Each time I went to a class, the blackboard was empty.' (5/5) / (?1/5) / (0/5)

The presence vs. absence of an index is also evident in (17). Here, the relevant interpretation is one where each DP picks out a different mayor. This is possible with the definite, which refers to the unique mayor in each situation (currently vs. in 2001), but not when the second DP is a demonstrative, which must pick up a salient antecedent and thus end up co-referring with the first DP. This leads to an inconsistent interpretation where the same individual comes from two different places (see Dawson & Jenks 2013)

- (17) Talking to a villager: *Currently, [the mayor] is from here, but in 2001...*

{el alcalde} / # {ese alcalde} / # {el alcalde ese} era de otro pueblo."
 the mayor that mayor the mayor that was of other town
 '... the/that mayor was from a different town.' (5/5) / (1/5) / (?2/5)

Finally, unlike the definite, both constructions give rise to an effect typically associated with demonstratives, namely anti-uniqueness: the inference that there is more than one entity with the NP-property (Hawkins 1978, Dayal and Jiang 2023). While this was not explicitly tested, consultants often quoted anti-uniqueness as a reason for rejection: for instance, *sol* 'sun', a globally unique entity, was found to be odd with both demonstratives, on the basis that there is only one sun:

- (18) ... mañana volverá a salir {el sol} / # {ese sol} / # {el sol ese}.
 tomorrow return.FUT.3SG to exit the sun that sun the sun that
 'The sun will come out again tomorrow.' (5/5) / (0/5) / (0/5)

Comment: "That sun"? What other sun is supposed to come out?

Overall, both constructions show typical demonstrative behaviour, lending support to their parallel treatment as indexed expressions.

3.2.2. The postnominal demonstrative as an adjective

The second element of the analysis is that the postnominal is an adjective, understood as a nominal adjunct with ϕ -features. This treatment is in line with Brugè (1996, 2002), who analyses the postnominal on par with other modifiers, and unlike Roca (2009), who considers it a special D head. Some key arguments for an adjectival treatment were already mentioned in Section 2.1: like other nominal modifiers, the postnominal co-occurs with a determiner and appears in different positions relative to other adjuncts; additionally, like adjectives and unlike PPs/relative clauses, it displays ϕ -agreement with the noun (see also Bošković 2009 for Slavic). The distributional facts can be captured assuming free adjunction at the phrasal level (Chomsky 1995, Hornstein & Nunes 2008): modifiers may recursively attach at NP-level as adjuncts, with different linear sequences of modifiers resulting from a different merging order. In what follows, we examine more closely the arguments for this adjectival analysis, as well as some of its consequences.

First, the postnominal interacts with other modifiers in expected ways. Like other modifiers, it may surface in different positions, but generally not following a relative clause, see (19). Thus, it appears to follow regular constraints favouring “heavy” modifiers in NP-final position.⁵

- (19) a. la maceta (**verde**) [PP de Celia] (**verde**) [CP que admiramos] (***verde**)
the flowerpot green of Celia green COMP admired.1PL green
‘the green flowerpot of Celia’s you admired yesterday’
- b. la maceta (**esa**) [PP de Celia] (**esa**) [CP que admiramos] (***esa**)
the flowerpot that of Celia that COMP admired.1PL that
‘that flowerpot of Celia’s you admired yesterday’.

Second, different word orders lead to different readings, following patterns of restrictive modification also found with other modifiers. To illustrate, we will compare the postnominal to the adjective *metálica* in (20).

- (20) a. la mesa *metálica* cuadrada
the table metallic square
‘the square metallic table’
- b. la mesa cuadrada *metálica*
the table square metallic
‘the metallic square table’

The DPs in (20) have the same presupposition (namely, that there is a unique square metallic table), but they impose different restrictions on what other tables there may be in the domain. (20a) can be paraphrased as: *there are potentially several metallic tables, only one of which is square*. By contrast, (20b) can be paraphrased as: *there are potentially many square tables, only one of which is metallic*. While the source of these inferences is still debated (Martin 2014, Masià 2017), the literature agrees that restrictive readings are a typical hallmark of postnominal modification in Romance. As expected if it is a modifier, the postnominal also gives rise to these readings (cf. also Roca 2009:507).

- (21) a. la mesa *esa* cuadrada
the table that square
‘the square metallic table’
- b. la mesa cuadrada *esa*
the table square that
‘the metallic square table’

⁵ Example (19) is based on the author’s intuition. Example (21) was not explicitly tested in this format, but the generalisations are based on Tests 40-41 in the Appendix.

Further, the postnominal shows behaviour typical of non-gradable adjectives such as *dead* or *geometric*. This is expected under the assumption that being identical to some entity (the contribution of the postnominal) is not a gradable property. Like *geometric/dead*, it does not admit degree modification with *más* ('more') or *muy* ('very').

(22) *ese libro ese
that book that

Restricting our attention to cases with the same distality, the second option is one where the two demonstratives bear the same index (e.g. *ese₁ libro ese₁*, ‘that book that’). This case ends up being redundant. The NP containing the postnominal demonstrative has the denotation in (23a) (see Section 3.2.). Adding *ese* ‘that’ instead of *el* ‘the’ as a determiner repeats the information that is already present in the restrictor: blindly applying functional application would result in (23b).

- I believe this kind of doubling to be generally disallowed for economy reasons. In this respect, compare analogous cases with the pre- and postnominal possessive, which are also infelicitous in Peninsular Spanish (#*su libro suyo*, ‘his book of-his’).

(24) A couple minutes ago, a creepy guy walks into the room and hides behind a large potted plant. You walk in, and I tell you in confidence:
a. *¡Ojo! Hace un rato he visto entrar a [un tipo inquietante]*₁

⁶ I would like to thank an anonymous reviewer for raising this issue.

- ‘Careful! A while ago I saw a weird guy enter the room.’
- b. # Ya había visto a **ese₁** **hombre** **ese₂** [pointing at man behind plant, g(2)]
 already had seen DOM that man that
 ‘I had already seen that man before.’

The intended reading is one where the DP *ese hombre ese* is simultaneously anaphoric and deictic, i.e. where the DP is simultaneously referring to the anaphoric antecedent *un tipo inquietante₁* and to a deictic referent (the man behind the plant, *g(2)*). According to Jenks & Konate (2022), the infelicity follows from a clash between the requirements of anaphoric and deictic reference: anaphora requires a given, old referent, whereas deixis introduces a new one.⁷ Considering this, we also want to rule out cases where the DP simultaneously refers to two potential anaphoric antecedents, as in (25):

- (25) a. [*Un chico llamado Mario*]₁ *saludó a* [*otro llamado Alberto*]₂
 ‘A boy called Mario greeted another boy called Alberto’
- b. # **Ese₁** **chico** **ese₂** era un poco tímido.
 that boy that was a bit shy
 Intended: ‘That_{1/2} boy was a bit shy.’

The intended (but impossible) reading is one where prenominal *ese* picks up Mario and the postnominal picks up Alberto. This option is ruled out by our semantics: in this configuration *ese₁ chico ese₂* could be paraphrased as ‘the unique boy that is identical to *g(1)* (=Mario) and to *g(2)* (=Alberto)’. This is not possible, as entities cannot be identical to two distinct individuals at the same time. Thus, this indexing scenario is also ruled out. In general, we can exclude the combination of two demonstratives based on these semantic reasonings.

Overall, the postnominal demonstrative is a nominal adjunct with ϕ -features, whose behaviour is parallel to that of other adjectives, and whose idiosyncrasies can be explained taking into account the posited semantics.

3.3. A new account of the definiteness restriction

The view of the postnominal as an adjective still faces one major threat: if it is an adjective, why can’t it combine with the indefinite article (cf. (4), repeated below)? This was one of the problems highlighted in the previous literature, as discussed in Section 2.2.

- (26) **el** / ***un** tornillo **ese**
 the a screw that

This pattern has a semantic explanation based on the pragmatic principle of Maximize Presupposition:

- (27) **Maximize Presupposition (MP).**
 Make your contribution presuppose as much as possible (Heim 1991)

MP regulates the competition between expressions with the same assertive content, but different presuppositional strength. Applied to the definite/indefinite alternation, MP says that, whenever uniqueness is satisfied, the definite “wins”, since it has a uniqueness presupposition that the indefinite lacks. With the postnominal demonstrative, uniqueness is always satisfied: the relation introduced is an identity function, mapping exactly one entity to each input entity. This means that there can only be one book identical to *g(1)*: the NP containing the postnominal always denotes a singleton set, see (28). Since uniqueness is always satisfied, the only felicitous option by Maximize Presupposition is

⁷ This case could also be ruled out by a general “Prohibition against Accidental Coreference” (PACO) (Büring 2005).

the definite article, explaining the contrast in (26).⁸

(28) $|\llbracket \text{libro ese}_{\text{NP}} \rrbracket| = |\{x \mid x \text{ is a book \& } x \text{ is identical to } g(1)\}| = 1$

Note that similar definiteness restrictions are found with other singleton-denoting NPs, for which Maximize Presupposition has also partly been argued to regulate their (in)felicity (Heim 1991, Coppock & Beaver 2012):

- (29) a. the / #a driver of the bus FUNCTIONAL NOUN
b. the / #a highest mountain SUPERLATIVE
c. the / #a same tree 'SAME'
d. the / #a first day of school. FIRST-NPS

A reviewer points out that, in some of these cases, MP seems to be less strict than with the postnominal, which can never be combined with the indefinite. I attribute this difference to the way uniqueness is established in each case. To illustrate, I will compare postnominal *ese* to relational nouns. Consider the sentences below:

- (30) a. **The / # A driver of the bus** arrived late.
b. **?The / A worker of the factory** organized a strike.

Both sentences contain a relational noun, and yet, out of the blue, only (30a) blocks the indefinite by MP. This is because, by world knowledge, we are aware that buses generally have one driver. Hence the definite must be used. If uniqueness doesn't hold, as in (30b) the indefinite becomes possible. In both cases, changing the context could affect the judgment. For instance, one could think of a scenario in which, for security reasons, multiple drivers have to be present in long bus trips. Here the indefinite would be allowed again. Conversely, one could imagine a world in the near future where, thanks to technical advancements, factories are run mostly by machines and robots, supervised by one single human worker. In this scenario, the definite becomes felicitous (in fact, by MP, it is the only possible option). By contrast, changing the context doesn't affect the availability of the indefinite with the postnominal, which is never allowed.

The reason for this contrast is that uniqueness is established differently in each case. With relational nouns, uniqueness is linked to world knowledge. In a simple ‘inherent relation’ analysis, relational nouns themselves introduce a relation, see (31a) (Partee 1983/1998). After combining with their first argument, the NP characterizes the set in (31b). As can be seen, the only criterion for membership in this set is to be a driver belonging to the unique bus. If the world is such that buses only have one driver, the set will be a singleton (triggering the application of MP), but if there are multiple drivers per bus, the set will have a larger cardinality, and the indefinite must be used.

- (31) a. $\llbracket \text{driver} \rrbracket = \lambda x. \lambda y. x \text{ is driver of } y$
 b. $\llbracket \text{driver of the bus} \rrbracket = \{x \mid x \text{ is a driver of the bus}\}$

⁸ The definiteness restriction for the postnominal also applies in the plural. MP is rarely discussed in connection with definite plurals, although it seems to apply in English/Spanish, see (i). The account can be extended to the plural as follows. Uniqueness is often assumed to be a special case of maximality (Sharvy 1980, Link 1983), and plural *the* introduces a presupposition ('there is a unique maximal individual') which plural indefinites lack. In the plural case, the assignment *g* picks out a plural individual (e.g. $g(I) = a \oplus b \oplus c$), and the NP denotes the singleton set containing that individual (ii). Thus, there is always a maximal individual, and MP forces the introduction of the definite.

(i) #unos / los padres del chico
IDF.PL / DEF.PL parents of=DEF boy
'#some / the parents of Ana'

By contrast, with demonstratives uniqueness is linguistically encoded by its identity relation: *being identical to $g(I)$* is a function that always maps to one entity only (namely, $g(I)$); thus, the set characterized by the postnominal is always a singleton, as illustrated in (28) above. Since the demonstrative is always a singleton, MP always applies regardless of the state of affairs in the world. Independent support for this argumentation comes from other elements that do not tolerate indefinites, such as *same* in Standard English. *Same* has also been argued to involve an identity relation (although mediated by a degree head, Hanink 2021) – thus, for this case it can also be argued that uniqueness is linguistically (rather than pragmatically) encoded.

To summarise this section, the definiteness restriction of the postnominal can be explained on semantic grounds. In fact, the restriction is just one example of a more general phenomenon applying to different NP types. The corollary is that the adjective semantics proposed in Section 3 can be maintained without positing a special syntactic relation between the postnominal and D.

4. The postnominal as a “weak demonstrative”: Behaviour in deixis

The previous section defended the view that the postnominal is an indexed adjective. However, this does not explain all of its properties. In this section, the hypothesis is explored that the postnominal is a “weak demonstrative” that cannot bear focus. This status explains a number of further properties of the construction, including its limited availability in deixis. First, I will demonstrate that the postnominal is deictic, based on a formal definition of the term based on Ebert et al. (2020). Then, I will present the evidence for its status as a weak demonstrative. Finally, I will show how its weakness affects its availability in deixis.⁹

4.1. The postnominal is deictic

A defining feature of demonstratives – as their name suggests – is that they are deictic, i.e. they “point”. But what is meant by “deixis” and how do we distinguish it from other gesture types? From the perspective adopted here, deixis (pointing) is situated within the larger phenomenon of speech-accompanying gestures (McNeill 1992, Schlenker 2018, Ebert 2020). While any DP may be accompanied by pointing, the way the gesture interacts with speech is not the same for definites and demonstratives: with the definite (as with most expressions) the content of the gesture is not at-issue, i.e. it does not contribute to the truth-conditions of the sentence; whereas with demonstratives it is (Ebert et al. 2020). An intuitive way to illustrate this difference is with the so-called ‘direct denial test’, which probes for reactions to “mistaken pointing”, illustrated in (32)-(33). With the demonstrative in (32), it is possible to reply as in (33a), but not as in (33b). With the definite in (32b), the reverse is true: (33b), but not (33a), is an appropriate reaction.

- (32) Context: A and B are from the USA. The president of Spain is giving a speech tonight. A points at a picture of the president of Argentina and says:
- a. “**That**→ **president** will give a speech tonight.”¹⁰
 - b. “**The president of Spain**→ will give a speech tonight.”

- (33) a. *No, that’s not the person who is giving a speech tonight.*
 b. *Yes, but you are pointing at the wrong person.*

⁹ The idea that the demonstrative is weak is in contrast with a previous analysis by Bernstein (2001), who claims it is focal instead. The data collected do not support Bernstein’s intuitions and they are more in line with Roca’s (2009) proposal that they are “topical”.

¹⁰ The arrow on that→ indicates a pointing gesture. I’m not committing to a particular speech-gesture alignment.

An intuitive explanation for this pattern is that *the president* in (32b) always refers to the unique president of Spain, regardless of the pointing gesture, and thus “mistaken pointing” leads to infelicity, rather than a change of referent. By contrast, the referent of *that president* depends on who is pointed at, which makes it possible to deny the content of the pointing gesture.

Why do definites and demonstratives behave differently? I argue this is due to the presence of an index in their denotation. According to our definition, demonstratives refer to a salient entity in the utterance context, the one picked up by the index. In turn, by pointing, speakers make an entity more salient (Grosz 2019). In deixis, these two elements yield one resolution: the gesture referent is salient, and thus it becomes the entity picked up by the demonstrative. By contrast, definite articles do not have an index. Since they only refer indirectly, they are unable to integrate contextual information directly into the at-issue composition (only mediated by (situational) domain restriction).

With this in mind, to evaluate whether a determiner is “deictic” or not, the question is not whether it is compatible or not with pointing – since all DPs are. Rather, the question is whether the content of the pointing, i.e., the gesture referent, is at-issue or not.

It seems that the postnominal demonstrative is deictic in this sense. In the direct denial test, it patterns with the prenominal in requiring a ‘no’ response. Further, in (35) (slightly modified from (13)), the postnominal picks out the relevant foreign president via pointing, whereas the definite can only refer to the country’s president, which is not the intended referent.

(34) A and B are from the USA. The president of Spain is going to give a speech tonight. A points at the picture of the president of Argentina, and says:

a. **El presidente de España** va a dar un discurso.

The president of Spain goes to give a speech
‘the president of Spain is going to give a speech’

=> **yes continuation in (33b)** (4/4)

b. **Ese presidente / El presidente ese** va a dar un discurso
that president the president that goes to give a speech
‘that president is going to give a speech.’

=> **no continuation in (33a)** (4/4) / (4/4)

(35) There was a political scandal in a neighbouring country. At the bus stop, you see a stranger carrying a newspaper with the picture of a political figure. You ask him what happened. He replies, pointing at the photo.

a. {**Este**→, **presidente**} / {**El presidente este**→} ha dimitido.
this president the president this has resigned

‘This president (=from a different country) has resigned.’ (5/5) / (4/5)

b.# **El presidente**→ ha dimitido.
the president has resigned
‘The president has resigned.’ (0/5)

Comment: *It’s odd if you are talking about the president of a different country.*

Another test probing for the at-issueness of pointing involves rigidity: demonstratives used with pointing obligatorily refer to the entity pointed at, whereas definites may refer to another entity, as long as it uniquely satisfies the descriptive content (Kaplan 1989, Ebert & Ebert 2014). In this respect, the postnominal patterns with regular demonstratives (and with the prenominal): unlike (36a), (36b) is judged false, since the demonstrative DP obligatorily refers to Juan (the person pointed at).

(36) Juan (a man) and María (a woman) are sitting next to each other. Juan is sitting on the left, and María is sitting on the right. The speaker points in Juan’s direction and says: “If the two people here switched places...”

a. **la persona sentada a la izquierda** sería una mujer.

- The person sat at the left be.COND a woman
 ‘... the person on the left would be a woman’ (4/4)
- b. #{**esa persona**} /#{**la persona esa**} **sentada a la izquierda** sería una mujer.
 that person the person that sat at the left be.COND a woman
 #‘... that person on the left would be a woman.’ (0/4) / (0/4)

Based on this evidence, it can be concluded that the postnominal – like the prenominal – is a deictic demonstrative.

4.2. The postnominal as a “weak demonstrative”

Having shown that the postnominal can be used deictically, we now turn to its distributional restrictions. In this section, evidence is presented that the postnominal is a weak demonstrative (inspired by the notion of “weak pronouns”, Cardinaletti & Starke 1999), which are special in their inability to bear focus. This section presents independent evidence in favour of this status, which will later be shown to affect the distribution of the postnominal in deixis.

The proposal that the postnominal is a “weak demonstrative” is tied to the observation that pronominal elements cross-linguistically can be “defective” in various ways. An influential proposal in this respect is Cardinaletti & Starke’s (1999) typology of pronouns, which distinguishes two subtypes of defective pronouns: weak pronouns (*es* in German, *egli* in Italian) and clitic pronouns (object *lo/la* in Italian) – both of which are distributionally restricted in comparison to full pronouns such as *he*. Subsequent typologies have been influenced by this account, either by also adopting syntactic approach to deficiency (Déchaine & Wiltschko 2022) or by elaborating on the interaction with phonology and semantics (Patel-Grosz & Grosz 2017, Grosz 2019).

While the properties associated with defective pronouns vary, one recurrent idea is that deficient, weak pronouns generally resist focus. The way in which this is captured differs from account to account. In some cases, in particular for clitic pronouns, the absence of focus can be easily explained on independent grounds, specifically their inability to project a separate phonological word (see Tyler 2019 for a recent discussion of English *it*). In other cases, a phonological source is less plausible, which prompts Cardinaletti & Starke to posit a syntactic explanation of their distribution. This applies particularly to pronouns such as Italian *essa* ‘she’ or *egli* ‘he’ in Italian, which may bear lexical or even phrasal stress.

In parallel to weak pronouns, I propose here that the postnominal is a weak demonstrative. In lack of a clear understanding of subclausal prosody in Spanish, it is difficult to commit to a particular syntactic or phonological structure. Instead, I make the weaker claim, based on the data to be presented shortly, that the postnominal is incompatible with certain contexts that require narrow focus on the demonstrative. As a preliminary observation, however, it is possible to liken the postnominal to weak pronouns (rather than clitic ones): intuitively, *libro* and *ese* are both stressed in *el libro ese*, and there is a clear perceptual difference between proximal *este* (penultimate stress) and the distal *aquel* (final stress).

The weak status of the postnominal is independently observable in at least two environments: First, the postnominal is unavailable in Noun Phrase Ellipsis (NPE). Spanish modifiers following the noun can usually be stranded in NPE, cf. (37) (see also Eguren 1999, Ticio 2016). By contrast, the postnominal cannot, and the prenominal has to be used instead, cf. (38).

- (37) a. ¿Qué libro quieres?
 what book want.2SG
 ‘Which book do you want?’
 b. El ~~libro~~ rojo / nuestro / de Cervantes.
 the book red ours of Cervantes
 ‘The red one/ours/the one by Cervantes.’

- (38) a. [**Ese**]_F ~~libro~~.
 that book (4/4)
 b. *El ~~libro~~ [**ese**]_F
 the book that
 Intended: ‘This one’ (0/4)

This follows if the postnominal is weak. First, assuming NPE remnants must be focused (Eguren 2010), a weak element could not act as one. Second, the definite article is a clitic, and needs an appropriate host to cliticise onto. It appears that the postnominal, a weak element itself, does not meet the necessary requirements.

This analysis is also consistent with more idiosyncratic patterns found when several modifiers are present.

- (39) a. * la ~~chaqueta~~ **esa** amarilla
 the jacket that yellow
 b. ? la ~~chaqueta~~ amarilla **esa**
 the jacket yellow that
 ‘that yellow jacket’ (3/4)
 c. la ~~chaqueta~~ amarilla **esa** de Adidas
 the jacket yellow that of Adidas
 ‘that yellow jacket by Adidas’ (4/4)

(39a) shows how the postnominal is still not available as a remnant when an adjective follows; however, the situation improves in (39b), when an adjective – an appropriate host – intervenes between the article and the demonstrative. Taken together, these two examples suggest that the main source of the unacceptability of (39b) is that the demonstrative does not make a good host for the definite. A subtle but interesting contrast arises between (39b-c): the best sequence is one where the demonstrative is followed by further material, as in (39c). This is consistent with the weakness of the demonstrative: when there is narrow focus inside the DP, it occurs DP-finally. Thus the postnominal is in an awkward position. Adding a PP, as in (39c), solves this problem.

The second environment narrow focus does not seem possible is in anaphoric cases such as the following:

- (40) A teacher is talking to another teacher about an exam he supervised: “First arrived a student, then another student, and another student...”
 ...y {**ESE** **estudiante**} / #{**el** **estudiante** **ESE**} se sentó en la primera fila.
 and that student the student that REFL sat in the first row
 ‘... and THAT student sat in the first row.’ (5/5) / (1/5)
 Comment (for postnominal): *The intonation doesn’t help.*

In (40), several entities with the same property are explicitly introduced in the context (the students). The underlying QUD is *Which student sat in the first row?*. The demonstrative is contrastively focused, and the capital letters indicate additional stress on the demonstrative. In these examples, only the prenominal was judged as natural, and the accent on the postnominal was found to be odd (cf. Roca 1999:506 for similar intuitions). Equivalent sentences where only one ‘student-antecedent’ was available were possible with both demonstratives.

4.3. Characterising the restrictions on deixis

The previous literature presents a rather contradictory picture regarding the deicticity of the postnominal. On the one hand, there were intuitions that the postnominal could not be used in pointing contexts, but on the other, deictic uses were also attested. Based on a technical definition of deixis, Section 4.1. argued that the postnominal can be deictic. However, there are indeed some restrictions, which I argue to result from ‘wrong’ focus-background configuration – namely narrow focus, which is incompatible with the weak demonstrative.

On the one hand, examples in which at-issue pointing was clearly accepted involved broad or DP constituent focus. One such example was presented in (14), where the president on a picture became the intended referent through pointing. Crucially, this example involved broad focus, as indicated by the explicit QUD ‘*What happened?*’.

On the other hand, the postnominal is dispreferred or rejected when deixis also involves narrow focus on the demonstrative. An initial piece of evidence is provided by direct question-answer pairs, where the postnominal is at least dispreferred over the postnominal.

- (41) (Interviewer shows image with several computers and asks): “*Which computer do you want?*”
- a. Quiero **ese ordenador**
want.1SG that computer (6/6)
- b. ?? Quiero **el ordenador ese**
want.1SG the computer that
‘I want that computer (4 maybe, 1 no, 2 yes)
- Comment for a): *This is what I would like to hear each time.*

One problem with this setup is that the most natural answer is one involving NP ellipsis (the equivalent of ‘that one’), and thus both answers in (41) require some form of accommodation on the speaker’s side. To avoid this issue, speakers were also presented with contexts where the implicit QUD also involved narrow focus on the demonstrative, but in which the noun phrase is not mentioned previously. One example is presented in (42): giving directions using the phrase ‘in that direction’ was only possible with the prenominal demonstrative.

- (42) A stranger asks: “Where is the nearest supermarket?”. You answer:
- “Tienes que ir en {**esa_F→dirección**} / # {**la dirección esa_F→**}”
have.2SG COMP go in that direction the direction that
‘You have to go in THAT direction.’ (5/5) / (1/5)

In (42), the implicit QUD is ‘*What direction does the person have to take?*’ which results in narrow focus on the demonstrative. In this context, the prenominal was found to be natural, whereas the postnominal was judged as odd. Another example is found in (43):

- (43) There are two cards facing down, and the interviewee knows that one is an ace of spades and the other one is a different card. Interviewer asks: *Adivina cuál es el as de picas* (‘Guess which (one) is the ace of spades’).
- “Es {**esta_F→ carta**} / # {**la carta esta_F→**}”
is this card the card this
‘It’s this card’ (5/5) / (2/5)¹¹

¹¹ In this setup, one person accepted the postnominal, and one thought it may be possible (‘maybe’).

In (43), the QUD can be taken to be *Which of these two cards is the ace of spades?*. This and similar examples – which involve deixis and narrow focus – were rejected with the postnominal, and accepted with the prenominal.¹²

Considered globally, this dataset suggests that there is no incompatibility between the postnominal and deixis, but only with the linguistic contexts in which some of this pointing occurs. This explains the mixed judgments regarding its deicticity: pointing is possible, but it is limited by its inability to be focal.

5. Comparison with possessives

The previous sections provided an analysis of the two Spanish demonstratives. While both carry an individual index, they differ their category (the pronominal is a determiner, the postnominal an adjective) and strength (the pronominal is strong, the postnominal is weak). These points allowed us to capture some unexplained behaviour of the postnominal, namely its definiteness restrictions and its apparent lack of deictic power.

Demonstratives, however, are not the only indexed elements which display a pre-/postnominal alternation in Spanish: possessive pronouns also appear as determiners and as modifiers, see (45).

- (44) a. **su** amigo
 3SG.POSS friend
 ‘his/her friend’
 b. el / ese / un amigo **suyo**
 the that a friend 3SG.POSS.M
 ‘his friend / that friend of his / a friend of his.’

Given their similarities, the literature often treats both alternations in parallel. Brugè (1996 2002), presented in some detail in Section 2.2., proposes a similar cartographic treatment for the possessive as for the demonstrative: the possessive is generated “low” in a functional projection, and the prenominal version is derived by moving the PossP to the specifier of D.

Following this tradition, this section extends the system introduced in Section 3 to the possessive alternation. The analysis partly draws from Simonenko & Carlier (2022), who make a similar semantic proposal, but extends the argumentation to include points that were raised in the demonstrative context.

The Spanish possessive pair is similar to the demonstratives in many respects. Syntactically, the alternations behave in a parallel fashion. On the one hand, the prenominal possessive is determiner-like: it cannot co-occur with articles and its position is fixed DP-initially. On the other hand, the postnominal possessive is adjective-like: it must co-occur with a determiner in argumental

¹² An anonymous reviewer agrees with most judgments presented here, but accepts contrastive focus on the postnominal in some settings, such as (i):

(i) El libro ESE compré, no aquel.
 the book that bought.PST.1SG not that.one
 ‘I bought that book, not that one.’

Since the reviewer is a speaker of Rioplatense Spanish, this example could point to dialectal variation - indeed, this type of focus fronting is not as readily available in Peninsular Spanish (Cruschina 2019) as in Rioplatense Spanish (Gabriel 2010)- Assuming the weak pronoun analysis is valid for Rioplatense Spanish, there are two explanations for (i): 1/ we could be dealing with DP focus instead of focus on the demonstrative (main DP stress is final, the whole DP is fronted); 2/ we are dealing with an exceptional focusing pattern found in corrective focus, which is also available with clitics, (ii). Both require further data to be evaluated.

(ii) (So Ana went to your party?)
 No, yo fui a mi fiesta y ella fue a SU fiesta.
 no I went to my party and she went to her party.
 ‘No, I went to my party and she went to HER party.’

positions, it can surface in various positions relative to other modifiers, it cannot follow relative clauses, and it can only be focused when DP-final (Picallo & Rigau 1999). These properties can straightforwardly be captured in terms of our D vs. A distinction, reflected in (45):

- (45) a. Prenominal possessive: $/su/ \leftrightarrow [D, POSS, IDX, 3]$
 b. Postnominal possessive: $/suyo/ \leftrightarrow [A, POSS, IDX, 3, M]$

The parallelism with demonstratives is also semantic. One obvious difference is that possessives express a relation between a possessee and a possessor (e.g. Partee & Borschev 2003), which in our case is introduced by a Poss head (see (45) above and Figure 4). In the case of possessive *pronouns*, this head takes idxP as its argument, which expresses the possessor. Overall, PossP denotes the property of being possessed by $g(I)$. As before, idxP comes with an antecedent presupposition, which, in this case, requires that there be a pre-mentioned or immediately perceptible antecedent for the possessor.

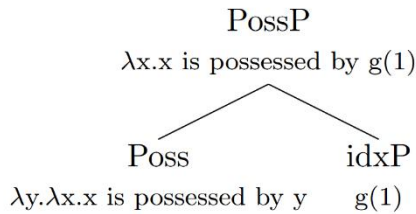


Figure 4. Structure and semantics of PossP

At this point semantic composition proceeds similar to the demonstrative case. In the prenominal construction, PossP is introduced as the specifier of a complex D^{Poss} head, as shown in Figure 6. This head takes two arguments, NP and PossP, returning an individual. Applied to *su libro* ('his book'), D^{Poss} takes *libro* 'book' and PossP ('the property of being possessed by $g(I)$ '), and returns the unique book that belongs to $g(I)$. Turning to the postnominal, PossP is an adjective and combines with *libro* via predicate modification. The determiner – here, a definite article – then takes this modified NP as an argument, returning the unique individual that is a book and that belongs to $g(I)$.

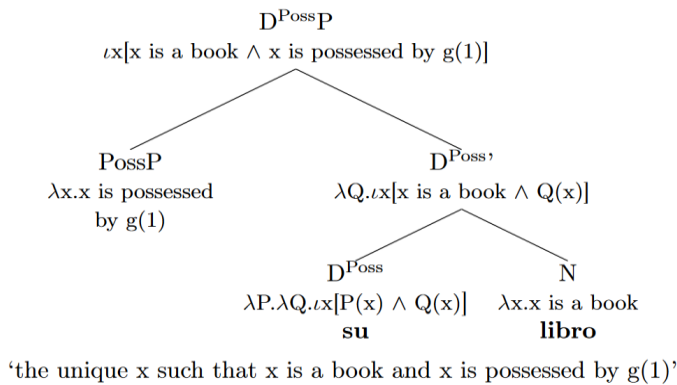
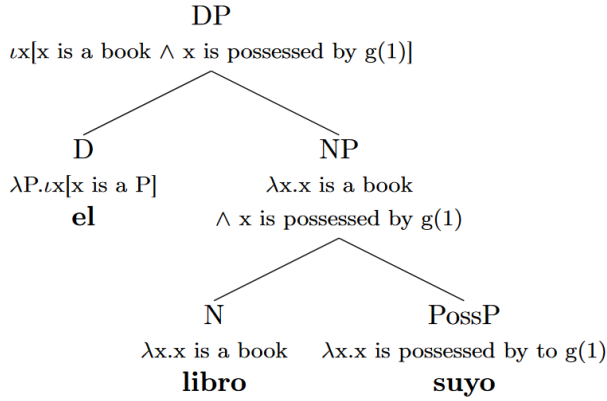


Figure 5. Prenominal possessive: Structure and derivation



‘the unique x such that x is a book and x possessed by g(1)’

Figure 6. Postnominal possessive: Structure and derivation

Having spelled out the semantics, we are now in a position to explain the differences between demonstratives and possessives. First, unlike their demonstrative counterpart, postnominal possessives do not have a definiteness restriction and may combine with both definites and indefinites, as could be seen in (44b) above. The reasoning is the same we applied in Section 3.4 with respect to relational nouns. The difference has, again, a semantic explanation, which lies in the relation introduced by each category: demonstratives express identity, whereas possessives express possession. As we saw in Section 3.4, identity relations are functions, and thus NPs containing them characterize singleton sets. By contrast, possessive relations are not necessarily functions: intuitively, there is no limit on the number of books g(1) may own – thus, the set characterized by a possessive NPs isn’t necessarily a singleton, as schematised in (46).

- (46) a. $|\llbracket \text{libro ese}_{\text{NP}} \rrbracket| = |\{x \mid x \text{ is a book \& } x \text{ is identical to } g(1)\}| = 1$
 b. $|\llbracket \text{librouyo}_{\text{NP}} \rrbracket| = |\{x \mid x \text{ is a book \& } x \text{ is possessed by } g(1)\}| \geq 1$

As a consequence, when g(1) happens to own only one book, Maximize Presupposition applies and the definite wins. When g(1) owns multiple books, the indefinite can be used.¹³

A second difference is that the postnominal possessive can be a remnant of noun phrase ellipsis, whereas the prenominal cannot, see (47). This is the opposite from what we found with demonstratives.

- (47) Context: Which book do you want?
 El ~~libro~~ **suyo**. / *Su ~~libro~~
 the book his.M his book
 ‘His/Hers.’

This difference mirrors the fact that, with possessives, it is the prenominal form that is weak – as is widely recognised in the literature (Picallo & Rigau 1999, Simonenko & Carlier 2022, a.o.). Specifically, prenominal possessives can be clearly classified as clitics: they behave like other “unstressed function words” in Spanish (Hualde 2009), losing their lexical stress and obligatorily cliticising onto the following word. Back to (47): *su*, as a clitic, needs a prosodic word as a host, and thus it ‘cannot stand alone’ in ellipsis. In turn, without phonological restrictions, the postnominal possessive can act as a (contrastively focused) NPE remnant.

¹³ An orthogonal question is what possessive form to use when uniqueness is satisfied. In principle, both the prenominal *su* and the postnominal *el+suyo* are available, but the latter is dispreferred in Peninsular Spanish (although possible, e.g. in ellipsis, cf. (47)).

6. Discussion

This paper provided the first formal semantic analysis of Spanish demonstratives. Its main novelty was the analysis of the postnominal, which differs from more ‘canonical’ demonstratives in being adjectival. It was shown how current semantic theories are well-equipped to capture much of its behaviour: treating it as an indexed adjective explains many of its properties, including its definiteness restriction. A second aspect of the proposal was that the postnominal is deictic, even though it displays some properties of a weak demonstrative. Overall, the paper makes a novel contribution to the study of the Spanish DP, as well as to the semantic study of atypical demonstratives cross-linguistically.

The idea that demonstratives can be adjectival is not new. This view has previously been proposed for various article-less languages, such as Bosnian-Croatian-Serbian and Russian (Bošković 2008, 2010), Czech and Polish (Corver 1992), and Mandarin Chinese (Bošković & Hsieh 2013, Varaschin & al. to appear). Indeed, the argumentation in Section 3.2.2 closely follows that of Bošković (2009), who draws on word order and morphological evidence to propose that Slavic demonstratives/possessives are adjectival, and that their idiosyncrasies can be semantically derived. This in turn allows him to argue that noun phrases in these languages are NPs, not DPs.

The novelty of the present proposal is the idea that DP languages may also have adjectival demonstratives. Concretely, Spanish appears to have lexicalised two demonstratives: one that is a determiner, and one that is an adjective. This fits the broader picture of the language, which displays various alternations of this kind: possessive pronouns (as discussed in Section 4), but also, for instance, free choice indefinites (*cualquier casa* vs. *una casa cualquiera* ‘any house’) (Alonso-Ovalle & Menéndez-Benito 2013). While a modifier treatment of the postnominal was already foreshadowed by Brugè (1996, 2002), the literature was generally reluctant to completely separate the demonstrative from D, possibly because of the obligatoriness of the definite. However, if the definiteness restriction of the postnominal is semantic, it is possible to maintain the adjectival analysis without appealing to a special relation with D. This semantic ‘taking stock’ has welcome consequences: for instance, it allows to clearly distinguish between the Spanish case and those where definiteness has clearer syntactic reflexes, such as multiple concord, article doubling, or demonstrative doubling (Alexiadou 2014, a.o.).

Further, in Section 3.3 it was proposed that the definiteness restriction of the postnominal follows from Maximize Presupposition. If the argumentation is correct, it makes the cross-linguistic prediction that, in languages that have both definites and indefinites, adjectival demonstratives will only co-occur with the definite determiner (provided that the relation introduced by the demonstrative is identity). One case confirming this generalisation is Ngamo (Chadic), whose demonstrative also co-occurs with the definite and behaves similarly to an adjective, making it amenable to a formalisation akin to that of Spanish (as in Grubic 2015). In general, the co-occurrence of demonstratives with definites is well-attested (Dryer 2013, Alexiadou 2014, Haspelmath 2013) – however, in order to assess our prediction, it is necessary to establish in which of these languages the demonstrative is truly adjectival.

Turning to deixis, existing demonstrative typologies have already observed the existence of weak demonstratives, such as Korean *ku* (Ahn 2017) and Romanian short demonstratives (Cornilescu 2013). However, so far they have mostly been treated as non-deictic: for example, Ahn (2017, 2022) argues they lack a gesture argument, which is what would allow them to be used in combination with pointing. The Spanish data present a more differentiated picture: the distribution of the postnominal is indeed restricted, but it passes classic tests for deixis, such as the direct denial and the rigidity test. This suggests that a two-way division between anaphoric and deictic demonstratives may not be sufficient to capture the cross-linguistic data.

Further avenues of research include confirming the weak pronoun patterns systematically, and evaluating whether the analysis extends to other varieties of Spanish. The two demonstratives have also been reported to differ substantially in their pragmatics, whose study is left to future research.

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