

## 1 Overview

- Where other languages use noun phrase ellipsis (NPE), English often requires use of the NP pro-form *one(s)*.

(1) Bill bought a long book, and I bought three short \*(ones).

(2) Pedro compró un libro largo, y yo compré tres cortos.

Pedro bought a book long, and I bought three short.

‘Pedro bought a long book, and I bought three short ~~books~~.’

- This is curious since English appears to have NPE in other contexts.

(3) a. I read John’s long book, but I didn’t read Bill’s  $\Delta$ .

b. I read several short books, but John didn’t read any  $\Delta$ .

It is unclear to me how widespread NPE actually is in English. See Chisholm (2001) for some discussion.

- In these contexts, *one* is usually impossible:

(4) a. \*I read John’s long book, but I didn’t read Bill’s one.

b. \*I read several short books, but John didn’t read any ones.

- But when a contrasting adjective is introduced ellipsis becomes impossible:

(5) a. I read John’s long book, but I didn’t read Bill’s short \*(one).

b. I read several books, but I didn’t read any long \*(ones).

Other modifiers can do this as well.

- Thus, NPE should be available in situations where we want to refer back to a previously uttered noun or NP, but for some reason this is not possible.

- There are two big questions:

i. *The language-internal question:*

Why do *one* and NPE have a (nearly) complementary distribution?

ii. *The cross-linguistic question:*

Why does English use *one* while other languages tend to use NPE?

I’ll be focused mainly on the first one of these today.

- A possibility is that *one* is a reflex of NPE that occurs in certain environments.

– They’re in complementary distribution because the environment in which each reflex occurs is different.

– This would mean English is only different on the surface. NPE occurs in the same places; it’s just that *one* appears sometimes.

Harley 2007; Llobart-Huesca 2002

- In this talk, I argue this view is wrong: *One* is not ellipsis. NPE is usually used when possible, and *one* is used in situations where NPE cannot be.
  - I show that anaphoric *one* cannot be derived by/from NPE and must be a distinct phenomenon.
  - I then argue that anaphoric *one* is used when NPE would target new or focused information.
  - Since ellipsis cannot delete material that is not GIVEN (Merchant 2001; Tancredi 1992), *one* must be used instead.
- I hypothesize that elliptical operations should be preferred to proforms.
  - Proforms are used in when the conditions on ellipsis are not satisfied.
  - Taking this hypothesis as a given, I show this can help us understand why anaphoric *one* has the distribution it does in English.
- This raises a number of difficult questions about NPE in other languages.
  - In particular, the structural assumptions would seem to predict that other languages should not strand adjectives when there is NPE.
  - However, some evidence from Spanish suggests that structural differences in adjective placement may play a key role.

For concreteness, I take the position that *one* is simply a N<sup>0</sup> proform that derives its interpretation anaphorically (Payne et al. 2013).

## 2 Kinds of *one*

- There are at least four elements with the spelling *one* in English:
  - (6) *Impersonal one* ( $one_P$ ): The third person pronoun.  
One must watch one's manners.
  - (7) *Numeral one* ( $one_1$ ): The numeral *one* that occurs in DPs:  
 I bought [<sub>DP</sub> the one book they had].
  - (8) *DP one* ( $one_D$ ): An indefinite pronoun, standing in for a full DP:  
 Bill bought a puppy, and Jill bought one, too.
  - (9) *NP one* ( $one_N$ ): A proform standing in for a proper subpart of a DP.  
 Sally bought the small chicken, and I bought the three big ones.

DP *one* is hard to tell apart from a bare numeral. Usually, the numeral receives stress, whereas the DP proform does not.

### 2.1 Distinguishing $one_N$

- I will be primarily concerned with  $one_N$ , and it is important to distinguish it from the other *ones* that exist.
  - Both  $one_N$  and  $one_D$  receive their meanings from other material in the discourse.
  - Numeral  $one_1$  probably has anaphoric uses as well.

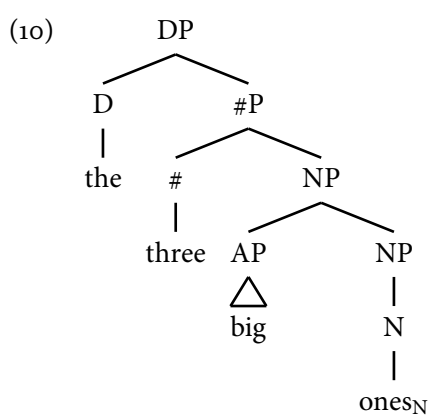
- $one_N$  is fairly easy to distinguish from the others. Taking a Harris 1946 approach, it is likely categorically distinct from determiners and numerals, occurring in a positions where nouns appear.

In fact, this is what Harris (1946:167) says about *one*.

- It co-occurs with numerals and determiners.
  - \* It thus replaces only part of a DP, unlike  $one_D$ .
  - \* It is therefore likely distinct from these elements.
- It occurs in definite DPs, also distinguishing it from  $one_D$ .
- It takes plural morphology, which distinguishes it from  $one_1$ .
- It follows adjectival modifiers, where nouns appear.

- A fairly traditional analysis is that  $one_N$  is just an anaphoric nominal proform.

This is similar, e.g., to what Jackendoff (1977:58ff) assumes.



I'm setting aside the question of exactly where numerals sit in the structure. They may be heads or in a specifier position. I am also ignoring the possibility that plural morphology sits on a different head for now.

- It is this sort of view that I will defend against the idea that ellipsis is involved.

### 3 Anaphoric *one* is not elliptical

- In this section, I show that  $one_N$  is not derived by or related to (NP) ellipsis.
- It is not uncommon in recent work to assume that anaphoric *one* is some sort of NP or  $N^0$  proform (Corver and Koppen 2010; Payne et al. 2013).
- However, some authors claim that anaphoric  $one_N$  is a SUPPORT element, similar to *do*-support, inserted when ellipsis deletes NP.

The idea that they are related derivationally goes back at least as far as Ross 1967.

The SUPPORT HYPOTHESIS

- Llobart-Huesca (2002) proposes that  $one_N$  is equivalent to *do*-support in the DP, supporting stranded number features.
- Harley (2007) proposes that  $one_N$  is inserted into a nominalizing head when NP is targeted for deletion.

- Llobart-Huesca's proposal rests on two central claims.
  - The distribution of  $one_N$  is like that of verb phrase ellipsis (VPE), and not gapping or stripping.
  - Anaphoric *one* and NPE are in complementary distribution and, therefore, the reflexes of the same operation.

Harley just takes ellipsis for granted so I focus on Llobart-Huesca 2002.

This is what I briefly showed in Section 1.

The NORWEGIAN HYPOTHESIS

- A different possibility is that some proforms actually introduce ellipsis sites.
- Bentzen et al. (2013) look at cases of the proform *det* ‘it’ in Norwegian (and *es* in German comparatives) that appear to stand in for verb phrases.

(11) Norwegian (Bentzen et al. 2013):

Jan kan løse problemet; Kari kan ikke det.  
 Jan can solve problem.DEF; Kari can not it  
 ‘Jan can some the problem; Kari can’t.’

- They argue that there are two kinds of *det* in Norwegian.
  - Det<sub>D</sub>* is the regular pronoun ‘it’.
  - Det<sub>S</sub>* introduces ellipsis sites.
- The two elements can be independently distinguished by, e.g., the fact that *det<sub>D</sub>* undergoes object shift but *det<sub>S</sub>* does not.
- Thus, *one<sub>N</sub>* could be the equivalent of *det<sub>S</sub>*, but in the English nominal domain.

D is for ‘deep’ and S is for ‘surface’, following the notions of Deep and Surface anaphora from Hankamer and Sag 1976. Surface anaphora is elliptical; deep anaphora is pronominal.

(12) *Det<sub>S</sub>*, following Bentzen et al. (2013:114)      One ellipsis hypothesis



- Critically, *det<sub>S</sub>* displays several behaviors associated with ellipsis, leading to the conclusion that *det<sub>S</sub>* comes with an ellipsis site.

And, in fact, there is a preference for *det<sub>S</sub>* over VPE in Norwegian, perhaps paralleling the preference for *one<sub>N</sub>* to NPE.

(13) Properties of ellipsis/surface anaphors:

- Inverse scope is possible
  - Missing antecedents can be introduced
  - Material may be extracted from ellipsis sites
  - Surface anaphors may not be pragmatically controlled
- Below, I show that there is no evidence for any ellipsis site when *one<sub>N</sub>* occurs.
    - *One<sub>N</sub>* has no ellipsis properties, and shows signs of being a proform.
    - This means there is no evidence for the Support Hypothesis or the Norwegian Hypothesis, which rely on ellipsis as a premise.
    - It is consistent with the view that *one<sub>N</sub>* is a proform.
  - It is an important first step to show that *one<sub>N</sub>* is not related to NPE.
    - If *one<sub>N</sub>* showed evidence of NPE, then *one* would just be a funny, language-specific reflex of ellipsis.

### 3.1 Tests for ellipsis

- If we apply the diagnostics from Bentzen et al. 2013 that show  $det_S$  introduces ellipsis sites, we find there that there is no independent evidence for ellipsis.

#### 3.1.1 Inverse scope

- Inverse scope readings are possible with ellipsis if they are available in the antecedent.

See Fox 1999 and Sag 1976.

(14) A doctor treated every student, and a nurse did, too.  
 $[\exists \text{ nurse} > \forall \text{ student}; \forall \text{ student} > \exists \text{ nurse}]$

- A quantifier in an DP can scope out of that DP, yielding an inverse scope reading:

(15) A teacher saw a recent picture of every student.  
 $[\exists \text{ teacher} > \forall \text{ student}; ?\forall \text{ student} > \exists \text{ teacher}]$

- However, anaphoric *one* does not permit inverse scope:

(16) A teacher saw a recent picture of every student,  
 and a nurse saw an old one.  
 $[\exists \text{ nurse} > \forall \text{ student}; *\forall \text{ student} > \exists \text{ nurse}]$

- The inability to get inverse scope readings here suggests  $one_N$  is a pronominal anaphor.

#### 3.1.2 Missing antecedents

- Missing antecedents are antecedents for pronouns that are not pronounced but are still active in the syntax.

Bresnan 1971; Grinder and Postal 1971

- These commonly occur in VPE, as demonstrated in (17b).
  - Indefinites in the scope of negation cannot establish discourse referents, as (17a) shows.
  - Presumably, the indefinite that establishes the referent for *he* in this example is a DP in the deleted VP.

(17) a. #Mary has never met an elf, and he was very short.  
 b. Mary has never met an elf, but Sally has  $\Delta$ , and he was very short.

- Bresnan (1971) and Hankamer and Sag (1976) argue that this is diagnostic of ellipsis sites.

- Crucially,  $one_N$  does not introduce missing antecedents:

Hankamer and Sag (1976:407) demonstrate this for  $one_D$ .

(18) \*Mary didn't sink a large boat carrying an elf, but she sank a small one, and he drowned.

- The inability to introduce missing antecedents suggests  $one_N$  is not elliptical.

3.1.3 *Extraction*

- It is typically possible to move material out of an ellipsis site.

(19) I don't know which puppy Bill will give you, but I know which one<sub>i</sub> he SHOULD [<sub>VP</sub> give you *t<sub>i</sub>*].

- It is also possible to move material out of indefinite DPs.

(20) Who<sub>i</sub> did you take a nice picture of *t<sub>i</sub>*?

- If *one<sub>N</sub>* introduces an ellipsis site, it should be possible to move material out of that ellipsis site, but this is not possible.

(21) \*What did Mary take a bad picture of, and what did John take a nice one?

- Notice that *one<sub>i</sub>* does not block extraction:

(22) Who<sub>i</sub> did you take only one picture of *t<sub>i</sub>*?

- There is no obvious reason why ellipsis should be blocked out of an ellipsis site in this case. This is consistent with *one<sub>N</sub>* being a pronoun.

In their discussion, Bentzen et al. 2013 link the inability to A'-move out of an ellipsis site introduced by *det<sub>S</sub>* to the inability to extract out of nominalized clauses introduced by *det*.

3.1.4 *Pragmatic control*

- Ellipsis requires a linguistic antecedent, while proforms can be interpreted in the pragmatically from context.
- In general, it is harder to license ellipsis without a linguistic antecedent.

Hankamer and Sag 1976

(23) **Situation** – *You and your friend walk into a room and all the windows are broken. Your friend says:*

- a. #Oh no! I wonder who could have Δ! VPE  
 b. Oh no! I wonder who could have done it! Deep Anaphora

- It seems to be true that *one*-anaphora very straightforwardly takes pragmatically licensed antecedents (compare Harley 2007, §4). Both cases in (24) are natural.

(24) **Situation** – *Bill is in a room waiting for me to arrive. I walk into the room holding a plate of cookies, and Bill didn't know that I was going to bring them. Bill asks::*

Oh, can I have a big one?

- Chisholm (2001:7) claims that NPE cannot be licensed pragmatically. Given the situation above this seems to be true:

(25) **Situation** – *Bill is in a room waiting for me to arrive. I walk into the room holding a plate of cookies, and Bill didn't know that I was going to bring them. Bill asks::*

- a. #Oh, can I have yours? [yours = your ~~cookies~~]  
 b. #Oh, can I have one of yours? [yours = your ~~cookies~~]

Llombart-Huesca (2002:64) claims that NPE can find a non-linguistic antecedent, but she demonstrates this with a bare demonstrative. It is unclear to me if there is ellipsis after bare demonstratives, and their meanings could be derived by some other means (see, e.g., Roberts 2002).

- The fact that *one<sub>N</sub>* behaves differently from NPE here suggests that *one<sub>N</sub>* is not elliptical.

Elbourne (2005:41) claims that NPE can be pragmatically licensed with some sort of 'deictic aid', but I doubt that any sort of deictic aid can save (25a).

3.2 Interpreting  $one_N$ 

- None of the above data provide evidence that  $one_N$  patterns with ellipsis.

DIAGNOSTIC	ELLIPSIS	$ONE_N$
Inverse scope	Yes	No
Missing antecedents	Yes	No
Extraction	Yes	No
Pragmatic control	No	Yes

- Thus, there is no evidence that  $one_N$  is a reflex of NPE: It does not introduce an ellipsis site, nor is it a support element.
- Thus, I propose that it should be treated as a  $N^0$  proform that occupies the same position as a regular noun.
- How does  $one_N$  get its interpretation?

- Payne et al. (2013) propose that  $one_N$  introduces a semantic element  $Ana$  of type  $\langle e, t \rangle$ , the same type as a common noun.

$$(26) \quad \llbracket one_N \rrbracket = \lambda x. Ana_{\langle e, t \rangle}(x)$$

- The interpretation of  $Ana_{\langle e, t \rangle}$  is presumably determined by the the interpretation function, introducing a variable of a higher type.
- This combines with various modifiers via the usual means (e.g., Predicate Modification):

$$* \llbracket \text{a big one} \rrbracket = \lambda P_{\langle e, t \rangle}. \exists x [Ana_{\langle e, t \rangle}(x) \wedge big'(x)] \wedge P(x)$$

$$* \llbracket \text{the one blue one} \rrbracket = \iota x [Ana_{\langle e, t \rangle}(x) \wedge blue'(x) \wedge |x| = 1b]$$

- The referent of  $Ana_{\langle e, t \rangle}$  can be the translation of any contextually available element of type  $\langle e, t \rangle$ .
  - This differentiates it from ellipsis, which usually requires salient linguistic antecedents, as in (3.1.4).
- Critically, because  $one_N$  is a lexical item, it lacks the distinguishing syntactic properties of ellipsis sites.
  - This explains the lack of inverse scope, missing antecedents, and extraction.

Their argument is a bit more complex than this, and I do not necessarily follow it in all of its details. In any case, the exact interpretation of  $one_N$  will not be a major concern for the remainder of the talk.

These linguistic antecedents are typically of type  $\langle e, t \rangle$ , which is why NPE and  $one_N$  have such similar meanings.

## 4 Contrast and blocking ellipsis

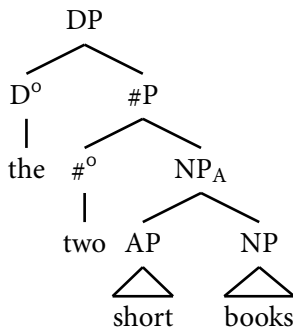
- Llobart-Huesca's (2002) claim that  $one_N$  and NPE are in complementary distribution is hard to understand if  $one$  is a proform.
- If  $one_N$  is just a noun with a special anaphoric interpretation, as Payne et al. (2013) propose, it should be interchangeable with NPE.
- But we saw at the outset that it is not.  $One_N$  cannot normally appear after possessives, some quantifiers, or numerals (a). But when a contrasting adjective occurs,  $one_N$  must be used (b).

This is on the assumption that ellipsis is an optional operation. Speakers can usually choose to do ellipsis if the conditions are met.

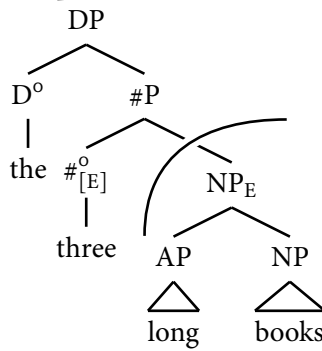




a. *Antecedent:*



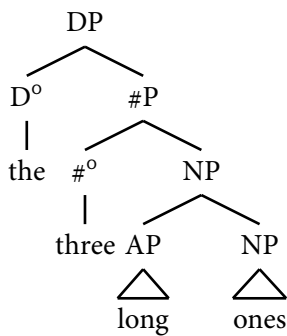
b. *\*Ellipsis:*



This follows from the semantic conditions on ellipsis. In order to occur, the material in the antecedent must match the material in the elided phrase. In these trees, the material in the antecedent NP<sub>A</sub> does not match the material in the ellipsis target NP<sub>E</sub>.

- Thus, when an adjective is adjoined to NP that contrasts with the antecedent, ellipsis should be blocked.
- The only option for a speaker intent on using an anaphoric construction is to use *one<sub>N</sub>* instead.

(34)



- Thus, the reason that *one<sub>N</sub>* and NP<sub>E</sub> appear to be in complementary distribution, as Lombart-Huesca (2002) claims, is not due to them being reflexes of the same operation, but due to the conditions on ellipsis not being met.
- As long as we assume that NP<sub>E</sub> is strongly preferred to *one<sub>N</sub>* when it is available, we can capture this distribution.

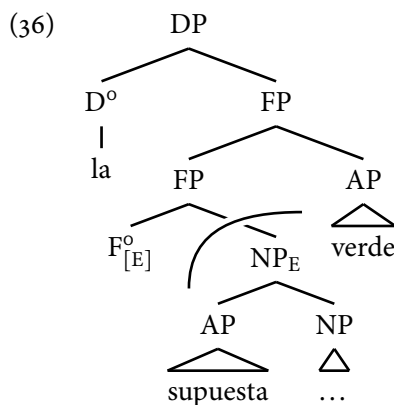
### 4.3 Stranding adjectives in other languages: Spanish

- One question the above analysis leaves open is why some languages permit stranding of adjectives with NP<sub>E</sub>.
  - This should not occur if languages all have the same structures for adjectival modification.
  - However, Spanish shows that languages may vary with regard to which adjectives are targeted by ellipsis.
- Spanish allows both pre-nominal and post-nominal adjectival modifiers, but only the post-nominal adjectives may be stranded by ellipsis:

See Ticio 2015 for an overview of the Spanish facts.

- (35) a. Ayer vi la casa azul y la  $\Delta$  verde.  
 yesterday I.saw the house blue and the green  
 ‘Yesterday I saw the blue house and the green (house).’  
 b. \*Ayer vi a la verdadera profesora y a la supuesta  $\Delta$ .  
 yesterday I.saw the real teacher and the alleged  
*Intended:* ‘Yesterday I saw the real teach and the alleged one.’

- Assume pre-nominal adjectives are lower in the structure than post-nominal adjectives.
  - NPE, as Ticio (2015) suggests, then we can account for this asymmetry if NPE targets a structure containing the pre-nominal adjectives but not the post-nominal ones.



- Without an equivalent of English *one<sub>N</sub>*, there is no alternative but to pronounce the noun if there is a pre-nominal adjective.

#### 4.4 A couple troubling cases

- There are a few more tricky cases, such as those involving determiners:

- (37) a. She bought a \*(big) one.  
 b. She bought the \*(big) ones.

- Here, it is distinctly possible that the definite and indefinite determiners license NPE but have different allomorphs when their complements are null.

See, e.g., Elbourne 2005; Johnson 2013; Postal 1969.

(38) *Determiner allomorphs before ellipsis sites:*

- a. [D, DEF, SG] ↔ it/\_\_\_ ∅  
 b. [D, DEF, PL] ↔ them/\_\_\_ ∅  
 c. [D, INDEF, SG] ↔ one<sub>D</sub>/\_\_\_ ∅

- If this is the right way to look at the problem, then the explanation is that preference for ellipsis should preclude the use of *one<sub>N</sub>* here.
- Demonstratives are even trickier.
  - It’s unclear to me whether cases like *this* and *that* ever have NPE after them.
  - Additionally, *this/that* sometimes mean something different from *this one/that one*, and this difference needs to be factored into how account for the co-existence of the forms.

Running the diagnostics from Section 3 on *one<sub>D</sub>* yields the same results: There is no evidence that *one<sub>D</sub>* involves ellipsis. Running the tests on *it* runs into several confounds.

## 5 Conclusions and prospects

- We might be able to explain the distribution of *one*<sub>N</sub> in English if we assume that focus contrast on nominal modifiers blocks NPE in certain contexts.
- Languages that allow stranding of (some) adjectives may have different structures for adjectival modification.
- An interesting consequence is that this suggests that APs cannot move out of ellipsis sites to escape deletion.
- But anaphoric *one* is unusual in that similar phenomena are not well attested outside of English; to my knowledge, only Dutch and Frisian dialects (Barbiers 2005; Corver and Koppen 2010) and Swedish (Teleman et al. 1999) display similar phenomena, but with notably different properties.

Or, perhaps, the size of ellipsis sites varies from language to language, as with VPE.

## Acknowledgments

Thanks to the audience at the Welcome Workshop at the University of Toronto for their discussion of an early version of this talk. The material in Section 3 has additionally benefited from conversations with Kyle Johnson, Ellen Woolford, and Seth Cable many years ago. Part of this research was supported by a UMass Linguistics Department Summer Research Grant, Summer 2012.

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