

ELBA 2024

El silencio de la sintaxis:

Una introducción al fenómeno de la elipsis

Clase 1. 23 de julio de 2024

0. En la clase de hoy...

1. Introducción

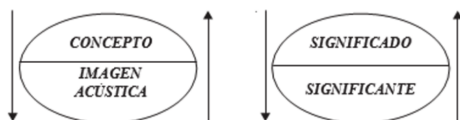
- (a) Definición de *ellipsis* y terminología básica
- (b) Principales tipos de construcciones elípticas
- (c) Enfoques en el estudio de la elipsis y las 3 preguntas fundamentales
- (d) Anáfora profunda vs. superficial + Tests/diagnósticos

2. La pregunta sobre la identidad

- (a) Evidencia a favor de la identidad sintáctica
- (b) Evidencia a favor de la identidad semántica

1. Background and definitions

- Saussure (1916):



- Selkirk (1948, p. 1): "A sentence of a language, uttered, is but a stream of sound, and that stream of sound has associated with it a certain meaning, or meanings. **A grammar of a language is a characterization of the relation between sound and meaning for the sentences of that language.** This relation between sound (phonetic representation) and meaning (semantic representation) is not a direct one. It is mediated by structure [...] **A theory of grammar has the task of characterizing the set of possible relations between sound and meaning** (the set of possible grammars) for language in general."

- **We are not telepaths:** we cannot convey meaning without uttering words/sentences, except...

Ellipsis

Phenomenon in which certain linguistic material is **omitted** but it's still **understood**.

- **Why ellipsis?** The usual mapping between form and meaning breaks down:
→ *there is meaning without form*
- Ellipsis raises fundamental questions about language and cognition:
 - How do we assign *meaning* to *silence*?
 - Does ellipsis have internal structure? What's that structure?
 - How is ellipsis processed in the brain?
 - How do children acquire the properties of ellipsis?
 - In which cases is ellipsis allowed? In which cases isn't it allowed? Why?
 - How does context condition the meaning of an elliptical sentence?
 - etc.

2. Silence(s) in language

- There are many cases where syntactic material seems to be missing, where we utter incomplete sentences, or where our speech is 'sub-sentential':

- (1) a. El año pasado me fui de vacaciones a Perú, y el anterior, a Brasil.
- b. *A mostrándole su nuevo auto a B:* Recién sacado de la concesionaria.
- c. La tesis de Andrés tiene más páginas que la de Laura.
- d. *A a B sosteniendo una carta que acaba de llegar:* De tu hermana.
- e. A: ¿A quién le diste la carta? B: A tu hermana.
- f. *A al de subirse a un taxi:* A Puan 480, por favor.
- g. *Una madre a su hijo:* ¡Con las dos manos!
- h. Manejar no es difícil si te enseño cómo.
- i. *En una panadería:* Dame tres de grasa y tres de manteca.
- j. etc.

→ *Not all that's missing is ellipsis:*

- **non-elliptical elements:** *pro*-elements (null subjects and objects), empty categories (e.g., nouns, predicates), implicit arguments, etc.
- **non-sentential fragments**
- **elliptical sentences:** sentences that contain a full-fledged syntactic structure, where some part is deleted/ omitted/ not-pronounced.

3. (Main) Types of Ellipsis

- Types of ellipsis → categorized based on what's silenced/omitted/elided
(in each case, the second clause *must* be understood as in the sentence below)

I. Nominal ellipsis: a noun is missing.

– NP Ellipsis

- (2) a. La tesis de Chomsky es mejor que la de Halle.
La tesis de Chomsky es mejor que la ~~tesis~~ de Halle.
- b. Chomsky's thesis is better than Halle's.
Chomsky's thesis is better than Halle's ~~thesis~~.

II. Verbal/Predicate ellipsis: a predicate or a verbal phrase is missing.

– VP Ellipsis:

- (3) a. Jason has taught syntax, and Karlos has too.
Jason has taught syntax, and Karlos has ~~taught syntax~~ too.
- b. *Jason ha enseñado sintaxis, y Karlos ha también.

– Modal Ellipsis*:

- (4) a. Quise publicar un paper, pero no pude.
Quise publicar un paper, pero no pude ~~publicar un paper~~.
- b. I wanted to publish a paper, but I couldn't.
I wanted to publish a paper, but I couldn't ~~publish a paper~~.

– PredP Ellipsis:

- (5) a. A: ¿Estás contento? B: Sí, estoy.
A: ¿Estás contento? B: Sí, estoy ~~contento~~.
- b. Ben will be in the garden, though he'd rather not be.
Ben will be in the garden, though he'd rather not be ~~in the garden~~.

III. TP ellipsis: an entire sentence, except for one word/phrase, is missing.

– Sluicing:

- (6) a. Vi a alguien en la fiesta, pero no recuerdo a quién.
Vi a alguien en la fiesta, pero no recuerdo a quién ~~vi en la fiesta~~.
- b. I saw someone at the party, but I don't remember who.
I saw someone at the party, but I don't remember who ~~I saw at the party~~.

– Fragment Answers:

- (7) a. A: ¿Quién escribió *Harry Potter*? B: JK Rowling.
A: ¿Quién escribió *Harry Potter*? B: JK Rowling ~~escribió *Harry Potter*~~.
- b. A: ¿Who wrote *Harry Potter*? B: JK Rowling.
A: ¿Who wrote *Harry Potter*? B: JK Rowling ~~wrote *Harry Potter*~~.

– Stripping:

- (8) a. Argentina ganó el Mundial, no Francia.
Argentina ganó el Mundial, no ~~ganó el Mundial~~ Francia.
- b. Argentina won the World Cup, not France.
Argentina won the World Cup, not ~~won the World cup~~ France.

IV. Other types:

– Gapping:

- (9) a. Sonia comió pizza y Bruno, ensalada.
Sonia comió pizza, y Bruno ~~comió~~ ensalada.
- b. Sonia ate pizza and Bruno, salad.
Sonia ate pizza and Bruno ~~ate~~ salad.

– TREQs:

- (10) a. A: Marta habló con Sandro. B: ¿Y Lucas?
A: Marta habló con Sandro. B: ¿Y Lucas, ~~con quién~~ habló?

– Comparative Ellipsis:

- (11) a. Pippen es más alto que Jordan.
Pippen es más alto que ~~alto es~~ Jordan.
- b. Pippen is taller than Jordan.
Pippen is taller than Jordan ~~is tall~~.

→ The meaning of the elliptical clause is highly restricted—i.e., it cannot mean anything else.

→ in all these cases the meaning of the elliptical clause is taken from the surrounding linguistic context: What allows us to "silence" part of a sentences in some cases but not in others, in some languages but not in others? What is the particular relation between the linguistic context and what gets elided?

4. Basic Terminology

(12) Ana comió algo ayer pero no sé qué (comió ayer).

Diagram illustrating the structure of the sentence:

- antecedent**: Ana comió algo ayer
- correlate**: algo
- remnant**: qué
- ellipsis site**: (comió ayer)
- source**: qué (comió ayer)

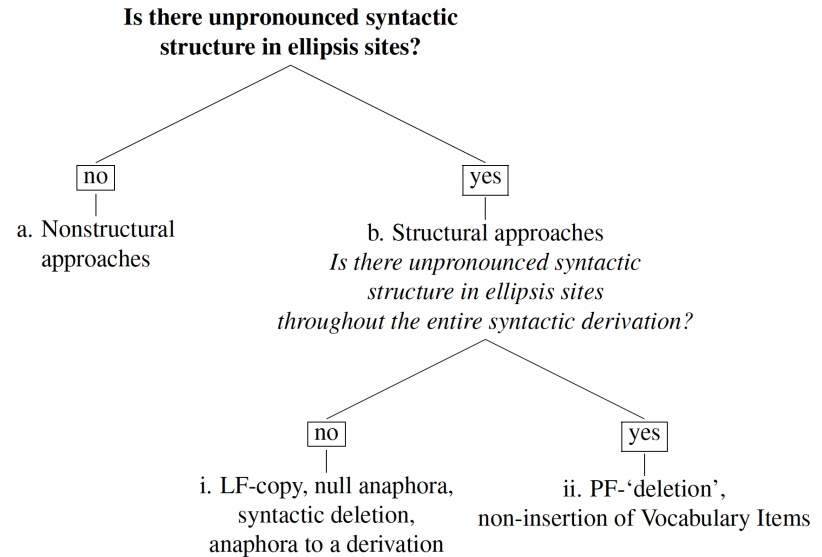
- *remnant* = what is not omitted
- *ellipsis site* = what is omitted
- *source* = the sentence formed by the remnant and the ellipsis site
- *antecedent* = the sentence that provides the meaning for the ellipsis site
- *correlate* = the element in the antecedent that corresponds to the remnant in the source

5. Main Questions

→ Most of the research on ellipsis (from a syntactic perspective) has focused on:

- **Structure question:** In ellipsis, is there syntactic structure that is unpronounced?
- **Identity question:** The understood elided material is identical/similar/related to some (linguistic) antecedent. What is the relationship between the material that has been elided and the linguistic antecedent that precedes it? Does ellipsis require identity in form, in meaning, neither, both, it depends?
- **Licensing question:** What syntactic configurations allow for ellipsis? What properties of ellipsis are found across languages, and which ones are specific to a given language?

6. Approaches to the study of ellipsis



→ **Non-structural approaches:** it will be necessary to supplement the theory of meanings, creating devices that can generate meanings in the absence of syntactic structure. [WSIWYG]

(13) Mi hermana ganó algo, pero no sé [s qué].

→ **Structural approaches:** it will be necessary to posit syntactic structure that is not pronounced.

- (14) a. Option 1 – Null elements:
Mi hermana ganó algo, pero no sé [qué [e]]. → *e* = empty element
- b. Option 2 – Deletion/Non-pronunciation:
Mi hermana ganó algo, pero no sé [qué [~~ganó~~]].

Structural vs. Nonstructural?

→ How do we decide whether some piece of syntactic structure is or isn't there, particularly when that structure in any case does not lead to any pronounced difference? **Indirectly.**

If one finds effects that seem to be due to missing material, there is an argument that such structure exists → if effects are found which we would attribute to properties of structure X in similar, nonelliptical, cases, but structure X is, by hypothesis, internal to the ellipsis site, then X exists.

If, on the other hand, expected properties are missing, one could conclude that structure X is absent.

7. Surface vs. Deep Anaphora

Not all that's missing is ellipsis.

- **Surface** vs. **Deep** Anaphora (Hankamer & Sag 1976)
(syntactically vs. pragmatically controlled anaphora)

- Anaphoric expressions are generally interpreted by reference to some linguistic antecedent, but some cases do not require such an antecedent.

- (15) a. Pedro_i habló con *sus*_i hijos. (16) a. Pedro habló con *tus* hijos.
b. Pedro_i *se*_i miró en el espejo. b. *Él*_j habló con Pedro_{*j}.

→ The examples in (15) illustrate **syntactically controlled anaphora**.

→ The examples in (16) illustrate **pragmatically controlled anaphora**.

- There are anaphoric processes (aka *ellipsis*) that *must* be syntactically controlled:

- (17) *Pedro ve a Paula andando en monociclo.*
Pedro: #Yo también.
(18) *Pedro ve a Paula andando en monociclo.*
Pedro: Yo también *lo hago*.
→ pro-form *do it (hacerlo)* as an anaphoric VP

→ The sentence (17) becomes grammatical if there is a linguistic antecedent:

- (19) Pedro: Paula anda en monociclo, y yo también.

- Two types of anaphora:
 - **Deep** anaphora = **pragmatically** controlled
 - **Surface** anaphora = **syntactically** controlled → it requires a syntactic antecedent

8. Some tests and diagnostics

Warning. No test or diagnostic should be taken on its own/in isolation.

Test 0: St. Isidore's diagnostic

- Something is missing that otherwise must be present.

This is easiest to see with respect to elements that are strictly subcategorized for:

- D (determiners) select an NP (not a PP):

- (20) los libros de Borges y los de Cortázar

- C (complementizers) select a TP (not a wh-phrase):

- (21) Mario cocinó algo, pero no sé qué.

- T (tense) select a VP (not a V/Aux):

- (22) Abby plays the guitar, and Ben does, too.

- Be careful not to confuse with implicit and null arguments—which, on the other hand, shouldn't be confused with Argument Ellipsis:

- (23) Null arguments:
a. El paciente comió a las once. → null/implicit object
b. Ayer *pro* comí pizza. → null subject
(24) Argument Ellipsis (Hebrew, Landau 2018):
Gil hizmin et axot-o. Yosi gam hizmin.
Gil invited ACC sister-his. Yosi too invited
'Gil invited his sister. Yosi did too.'

Test 1: Pragmatic control

As we saw above. Although, some cases of ellipsis can be pragmatically controlled (Pullum 2000, Merchant 2004). Take it as a starting point and with a grain of salt.

Test 2: Missing Antecedents

- Indefinites inside ellipsis sites can provide antecedents ('missing' from the surface) to pronouns. Such examples contrast with anaphors like *do it / hacerlo*:

- (25) a. I've never ridden a camel_i, and it_i stank horribly.
b. *I've never ridden a camel_i, and it_i stank horribly.
(26) I've never ridden a camel, ...
a. ...but Ivan has ridden a camel_i, and he says it_i stank horribly.
...but Ivan has ~~ridden a camel~~_i, and he says it_i stank horribly.
b. *...but Ivan has *done it*, and he says it stank horribly.
(27) a. Ayer monté un camello_i, y pro_i huele muy mal.
b. *Nunca monté un camello_i, y pro_i huele muy mal.
(28) Nunca monté un camello, ...
a. ...pero Iván sí montó un camello_i, y dijo que pro_i olía mal.
...pero Iván sí ~~montó un camello~~_i, y dijo que pro_i olía mal.
b. ?...pero Iván sí *lo hizo*, y dijo que pro_i olía mal.

→ VP-anaphors can give rise to 'missing antecedent' effects in some cases (Hardt 1993, Johnson 2001, Frazier 2010). Always compare with *do-it* pro-form.

Test 3: Syntactic parallelism

- Only surface anaphora requires syntactic parallelism:

- (29) Nobody else would take the oats down to the bin, ... *Active sentence*
- ...so Bill did. → ellipsis of the VP
(i.e., ...so Bill did ~~take the oats down the bin~~)
 - ...so Bill did it. → proform *do it*
 - ...so did volunteered. → Null Complement Anaphora
- (30) The oats had to be taken down to the bin, ... *Passive sentence*
- *...so Bill did. → ellipsis of the VP
(i.e., ...so Bill did ~~take the oats down the bin~~)
 - ...so Bill did it. → proform *do it*
 - ...so did volunteered. → Null Complement Anaphora
- (31) a. Los manifestantes fueron reprimidos por la policía, ...
- *...por eso la gendarmería también.
 - ...por eso la gendarmería también *lo hizo*.

→ The syntactic parallelism requirement also depends on the ‘size’ of the ellipsis site:

- (32) a. The system can be used by anyone who wants to.
The system can be used by anyone who wants to ~~use it~~.
- b. *The system can be used by anyone who wants.
*The system can be used by anyone who wants to ~~to use it~~.

Test 4: Extraction

- Ellipsis sites can be extracted out of, atomic elements cannot.
→ all types of extraction—A', A, and X⁰ extraction—are attested out of ellipsis sites.

– A' extraction (e.g., topicalization):

- (33) a. Draco se burló de Ron, y de Harry, también.
Draco se burló de Ron, y [de Harry]_i, también se ~~burló~~ _____.
- b. *Draco se burló de Ron, y de Harry, también lo hizo.
- (34) a. Tomatoes, I like, but potatoes I don't.
Tomatoes, I like, but [potatoes]_i I don't ~~like~~ _____.
- b. *Tomatoes, I like, but potatoes I don't do it.

– A extraction (e.g., subject movement/raising):

- (35) a. Sam seems to be happy, but Ben doesn't.
Sam seems to be happy, but [Ben]_i doesn't seem _____ to be happy.

– X⁰ extraction (Galician):

- (36) A: Comiches a torta?
ate.you the cake
'Did you eat the cake?'
- B: Comín.
ate.I
'I did.'
- B: [TP Comín_i [_{VP} _____ la torta].

Test 5: Agreement

- Elements inside ellipsis sites can trigger agreement on items outside the ellipsis site:

- (37) El libro de Borges está en la mesa, pero **los** de Cortázar **están** en la biblioteca.
...pero ~~los libros~~ de Cortázar **están** en la biblioteca.
- (38) I didn't think there would be many linguists at the party, but there {**were** | ***was**}.
...but there {**were** | ***was**} ~~many linguists at the party~~.

Test 6: Inverse scope

- Quantificational elements inside ellipsis sites can take wide scope over elements outside the ellipsis; such inverse scope readings are missing from anaphoric devices:

- (39) a. A doctor examined every patient, and then a nurse did. (∀∃; ∃∀)
- b. A doctor examined every patient, and then a nurse *did it*. (∀∃; *∃∀)
- (40) a. Un médico examinó a cada paciente, y después una enfermera. (∀∃; ∃∀)
- b. Un médico examinó a cada paciente, y después una enfermera *lo hizo*. (∀∃; *∃∀)

9. Taking stock

- A non-exhaustive list of tests and diagnostics:

	surface anaphora	deep anaphora
pragmatic control	*	ok
missing antecedents	ok	*
syntactic parallelism	required	optional
extraction	ok	*
agreement	required	optional
inverse scope	ok	*

[No single test should be used in isolation or considered definitive proof.]

10. Tarea/Ejercitación/Para pensar

El complemento de los verbos modales (*poder, querer, deber, etc.*) muchas veces puede ser nulo, como muestran los ejemplos a continuación:

- (41) Martín quiso viajar a Qatar, pero no pudo.
- (42) Me dijeron que no pasa nada si rindo el final en diciembre, pero yo no quiero.
- (43) El gobierno quiere seguir recortando el gasto público, aunque sabe que no debería.

Estos casos se conocen como *Modal Ellipsis*, y, a pesar del nombre, se debate si son realmente casos de elipsis en sentido estricto, o si son elementos nulos sin estructura sintáctica. Usando los tests que discutimos hoy, ¿a qué conclusión llegás vos?

11. What is ellipsis, then?

- Key points so far:
 - In ellipsis, syntactic material that should be overt is silenced or omitted.
 - The elliptical sentence is interpreted similarly to its nonelliptical counterpart.
 - Elliptical structures differ from other types of anaphora that do not involve omission/deletion (pronouns, pro-forms, etc.).
 - Although ellipsis involves the omission of phonological material, evidence suggests that this material is still somehow present.

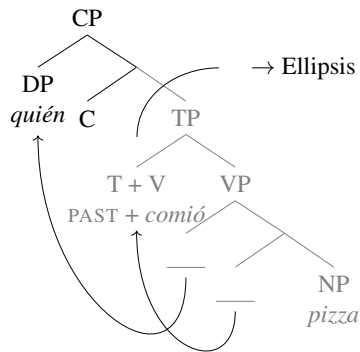
Working Hypothesis: In ellipsis, there is a full-fledged syntactic structure that is not pronounced.

Type of ellipsis → size of the ellipsis site (i.e., the size of the unpronounced structure):

- (44) TP-ellipsis (e.g., sluicing)

Surface: Alguien comió pizza, pero no me acuerdo quién.

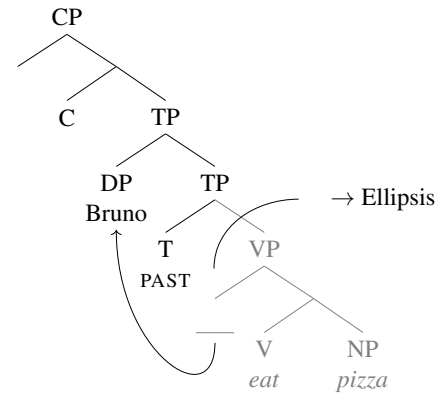
Syntax: Alguien comió pizza, pero no sé [CP quién ⟨Ellipsis site ~~comió pizza~~⟩].



- (45) Verb-Phrase Ellipsis:

Surface: Sonia ate pizza and Bruno did too.

Syntax: Sonia ate pizza and [CP Bruno PAST ⟨Ellipsis site ~~eat pizza~~⟩ too].



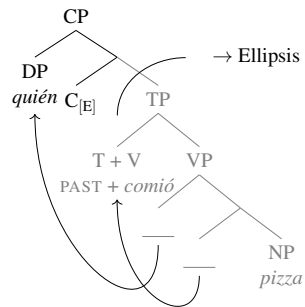
- Some questions:
 - What triggers ellipsis?
 - What determines the size of the ellipsis site?
 - What are the constraints on what can and cannot be elided?
 - What explains/accounts for cross-linguistic differences?

- Some answers:

– **What triggers ellipsis?**

An [E] feature, that can optionally appear on certain heads (Merchant 2001). This feature gives the instruction to omit/not-pronounce its complement.

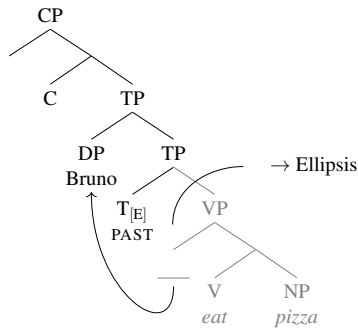
E.g., in TP-ellipsis, [E] is on C:



– **What determines the size of the ellipsis site?**

The size of the ellipsis site is determined by which head bears the [E]-feature.

E.g., in TP-ellipsis, [E] is on C, and in VP-ellipsis, [E] is on T:



– **What are the constraints on what can and cannot be elided?**

Elliptical sentences have a linguistic antecedent. The ellipsis site has to be ‘similar’ to its antecedent. If the two structures are not similar enough, ellipsis is not licensed.

– **What explains/accounts for cross-linguistic differences?**

Many factors can explain crosslinguistic differences:

- Whether some heads but not others can bear the [E]-feature.
- The requirements of the [E]-feature (e.g., agreement).
- Properties of each language: case marking, (im)possible movements, weak/strong agreement, other idiosyncratic properties, etc.

12. The identity condition(s) on ellipsis

- Ellipsis is **anaphoric** and depends on its **linguistic context** to get its meaning.
- The attested meanings for ellipses are usually connected to the **linguistic antecedent**.

- (46) Alguien rompió un espejo ayer durante el partido, pero no me acuerdo quién.
- a. Alguien rompió un espejo ayer durante el partido, ...
- i. ...pero me acuerdo quién rompió un espejo ayer durante el partido.
- ii. #...pero me acuerdo quién rompió un vaso ayer durante el partido.
- iii. #...pero me acuerdo quién rompió un espejo el año pasado.

→ What is the relation between an elliptical structure and its antecedent?

There are broadly three kinds of answers to these questions:

- Semantic/Weak Identity: the relation between the ellipsis site and its antecedent involves a kind of **identity of meaning**.
- Syntactic/Strict Identity: the relation between the ellipsis site and its antecedent involves a kind of **identity of structure**.
- Hybrid/Mixed Identity: a bit of both.

13. Evidence for syntactic/strict identity

→ Evidence will come from contexts where just similarity in meaning is not enough—i.e., structural isomorphism is required:

i. Voice mismatches (Merchant 2013):

- Active sentences mean (truth-conditionally) the same than their passive counterparts:

- (47) Ben fue asesinado (por alguien) ~ Alguien asesinó a Ben.
- (48) Ben was murdered by someone ~ Someone murdered Ben.

- However, an active ellipsis site cannot have a passive antecedent, and a passive ellipsis site cannot have an active antecedent:

- (49) passive antecedent–active source:
- a. *Ben was murdered, but we don’t know who.
Ben was murdered, but we don’t know who (~~murdered Ben~~).
- b. *Ben fue asesinado, pero no sé quién.
Ben fue asesinado, pero no sé quién (~~asesinó a Ben~~).

- (50) active antecedent–passive ellipsis:
- *Someone murdered Ben, but we don't know {who by | by who(m)}.
Someone murdered Ben, but we don't know by who(m) (~~Ben was murdered~~).
 - *Alguien asesinó a Ben, pero no sé por quién.
?Alguien asesinó a Ben, pero no sé por quién (~~fue asesinado~~).

→ Note that the non-elliptical sentences are grammatical.

Assumptions

- Elliptical sentences are the result of 'silencing' certain parts of a syntactic structure.
- If a non-elliptical sentence is grammatical, its elliptical counterpart is also grammatical; if a non-elliptical sentence is ungrammatical, its elliptical counterpart is also ungrammatical.
→ Any deviations from (ii) should be explained.

ii. Auxiliaries & Tense:

- In general, verbs don't require morphological identity (51); but forms of *be* do require morphological identity (52):

- (51) Emily played beautifully at the recital and Ana will, too.
E. played beautifully at the recital and A. will (~~play beautifully at the recital~~), too.
- (52) *Emily was beautiful at the recital and Ana will, too.
Emily was beautiful at the recital and Ana will (~~be beautiful at the recital~~), too.

→ it's variability in *form* rather than *meaning* what determines ellipsis possibilities

- In Spanish TPE, where Tense is inside the ellipsis site, Tense mismatches are ungrammatical:

- (53) *Hoy, canta Emily en el recital, pero mañana, no sé quién.
Hoy, cantó E. en el recital, pero mañana, no sé quién (~~cantará en el recital~~).

14. Evidence for semantic/weak identity

→ Evidence will come from contexts where strict identity is not met—i.e., where we find structural mismatches between the ellipsis site and its antecedent:

i. Negative polarity items

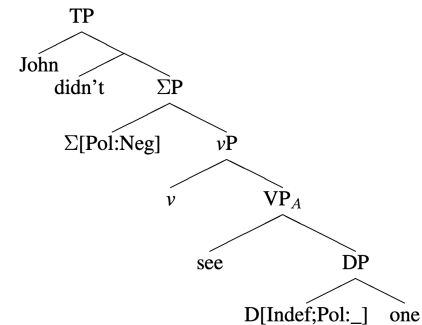
- While it can be argued that the semantics of *someone* and *anyone* are identical—both corresponding to an existentially bound variable—it is less clear if their syntax is as well.

- (54) Juan no vio a nadie, pero María sí.
- Juan no vio a nadie, pero María sí (~~vio a alguien~~).
 - *Juan no vio a nadie, pero María sí (~~vio a nadie~~).

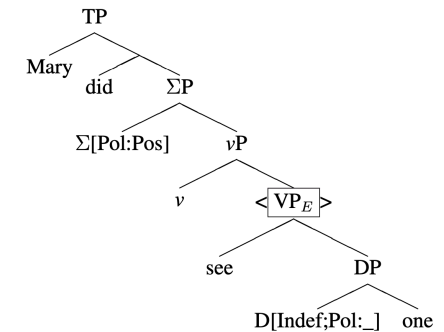
- (55) Juan vio a alguien, pero María no.
- ≠Juan vio a alguien, pero María no (~~vio a alguien~~).
 - Juan vio a alguien, pero María no (~~vio a nadie~~).
- (56) John didn't see anyone, but Mary did.
- John didn't see anyone, but Mary did (~~see someone~~).
 - *John didn't see anyone, but Mary did (~~see anyone~~).
- (57) John saw someone, but Mary didn't.
- ≠John saw someone, but Mary didn't (~~see someone~~).
 - John saw someone, but Mary didn't (~~see anyone~~).

- Merchant (2013): the examples above are compatible with a syntactic identity condition.
 - Giannakidou (2000, 2007): polarity items have a syntactic feature [Pol:_] which is valued under Agree with a c-commanding 'licensor' such as negation:

- (58) a. Antecedent:



- b. Ellipsis-site



- (59) Lexical Insertion rules

- [Cat[D, Indef]; Infl[Pol:Neg]] ↔ any
- [Cat[D, Indef]; Infl[Pol:Pos]] ↔ some (sm)/a

→ certain expressions have varying morphological realizations, depending on their syntactic environment; which morphology is realized is determined by agreement with a valuer