

## The syntax of ellipsis

The primary goal of contemporary theoretical linguistics is to develop a theory of the correspondence between sound (or gesture) and meaning. Nowhere does this sound-meaning correspondence break down more spectacularly than in the case of ellipsis. And yet various forms of ellipsis are pervasive in natural language—words and phrases that by rights should be in the linguistic signal go missing. How is this possible?

Merchant (2001)

### 1 What is ellipsis?

**Working definition:** Ellipsis is a mismatch between sound and meaning in which certain selectional requirements are not met in the phonetic realization of the sentence.

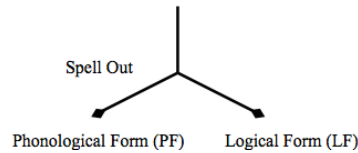
- (1) Max has climbed Mt. Everest, and Liz has, too.

**Interpretation (meaning):** Max climbed Mt. Everest, and Liz climbed Mt. Everest too.

**Phonetic realization (sound):** Max has climbed Mt. Everest, and Liz has [ ], too.

→ The Verb Phrase selected by the perfective auxiliary has is left unpronounced.

- (2) **Terminology:**  
Max has climbed Mt. Everest... antecedent  
... and Liz has [climbed Mt. Everest], too. ellipsis site, elided material  
The ellipsis site is marked in the literature in different ways, including *t*, *e*,  $\Delta$ .
- (3) **The Y-model of grammar** (Chomsky, 1995)



Ellipsis presents a case of (extreme) sound-meaning mismatch.

- ☞ Crucial question: what is present in the syntax?
- Does the syntax match the interpretation?
- Does the syntax match what is pronounced?

### 2 Today

1. What kinds of ellipsis are there?
2. What is not ellipsis?
3. Some syntactic assumptions.
4. (Time permitting) cross-linguistic variation in ellipsis.

### 3 Three questions in the study of ellipsis

- **The Representations Question:** What are the representational bases of ellipsis? (Is there syntactic structure in the gap site? What properties distinguish ellipsis from other types of (null) anaphora in English?)
- **The Operations Question:** What is the grammatical mechanism (or mechanisms) that produces ellipsis in English? (Deletion operation? copying? inference?...)
- **The Resolution Question:** How are the interpretations of anaphoric and elliptical expressions resolved in real time language use?

### 4 Types of ellipsis

#### 4.1 Verb phrase ellipsis (VP-deletion)

- (4) Max has climbed Mt. Everest, and Liz has  $\Delta$ , too.
- (5) A: My daughter absolutely adores spinach!  
B: My son doesn't  $\Delta$ .
- (6) Abby likes her sister. Beth does  $\Delta$ , too.

→ What is missing?

The verb phrase: ... and Liz has ~~climbed Mt. Everest~~, too.

#### 4.2 Sluicing

- (7) Somebody just left—guess who  $\Delta$ . (Ross, 1969, p. 252)

- (8) He is writing something, but you can't imagine  $\left\{ \begin{array}{l} \text{what} \\ \text{where} \\ \text{why} \\ \text{how (fast)} \\ \left\{ \begin{array}{l} \text{to} \\ \text{with} \\ \text{for} \end{array} \right\} \text{whom} \\ \text{etc.} \end{array} \right\} \Delta$ .

→ What is missing?

The entire TP, except for the *wh*-element: ... but you can't imagine what ~~he is writing~~.

#### 4.3 Pseudogapping

- (9) Max has climbed Mt. Everest, and Liz has  $\Delta$  Mt. Kilimanjaro.
- (10) I won't ride up streets the wrong way, but I will  $\Delta$  alleys  $\Delta$ . (Levin, 1979, p. 15)

→ What is missing?

The verb phrase except for its internal arguments, leaving behind a tensed auxiliary: ...and Liz has ~~climbed~~ Mt. Kilimanjaro.

#### 4.4 Gapping

- (11) Max has climbed Mt. Everest, and Liz  $\Delta$  Mt. Kilimanjaro.  
(12) Dana will read *War and Peace*, and Kim  $\Delta$  *Moby Dick*.

→ What is missing?

The verb phrase except for its internal arguments (no tensed auxiliary): ...and Kim ~~will read~~ *MD*.

#### 4.5 Stripping

- (13) Dana ate ice-cream, but not Kim  $\Delta$ .  
(14) Should I do it, or  $\Delta$  you  $\Delta$ ?

→ What is missing?

The entire clause except for 1 argument (and one negation or intensifier): ...or ~~should~~ you ~~do it~~?

#### 4.6 Fragment answers

- (15) What did Dana eat? —Ice-cream.

→ What is missing?

The entire clause except for 1 constituent, the answer to the question: ... ~~Dana ate~~ ice cream.

#### 4.7 Null Complement Anaphora

- (16) I asked Dana to come, but she refused  $\Delta$ .  
(17) The board considered the new proposal, but half of the members objected  $\Delta$ .

→ What is missing?

The entire complement clause: ... but half of the members objected ~~to the proposal~~.

#### 4.8 Ellipsis in comparative clauses

- (18) Dana ate more ice-cream than Kim did  $\Delta$ .  
(19) Dana ate more ice-cream than Kim did  $\Delta$  cake.  
(20) We have more to fear from them than they  $\Delta$  from us.

→ What is missing?

Part of a comparative clause (the size of the ellipsis site varies):

... than Kim did ~~eat ice-cream~~.

... than Kim did ~~eat~~ cake.

... than they ~~have to fear~~ from us.

VP-ellipsis  
pseudogapping  
gapping

#### 4.9 Swiping (a subtype of sluicing)

- (21) Ivan was talking, but I can't remember who  $\Delta$  to.  
(22) Dana was dancing, but I don't know who  $\Delta$  with.

→ What is missing?

The entire clause except for a *wh*-element and a preposition: ... but I don't know who ~~she was dancing~~ with.

#### 4.10 Noun phrase ellipsis

- (23) I like Bill's yellow shirt, but not Max's  $\Delta$ .

(Jackendoff, 1971, p. 28)

- (24) Steve bought these pants and Jeff bought those  $\Delta$ .

→ What is missing?

A nominal projection, NP or perhaps  $\bar{N}$ : ... but not Max's ~~yellow shirt~~.

### 5 What is *not* ellipsis?

Not all expressions with a mismatch between sound and meaning are considered ellipsis in the generative framework. In particular, cases where there doesn't seem to be any syntax probably don't involve any deletion.

#### 5.1 Signs, labels, titles

- (25) a. Coca Cola (label on a bottle of soda)  
(Interpretation: This is a bottle of Coke.)  
b. Ottawa 200 km (sign on the highway)  
(Interpretation: The distance from here to Ottawa is 200 kilometers.)  
c. The Hobbit (title on a book)  
(Interpretation: The title of this book is The Hobbit.)

#### 5.2 Fixed expressions

- (26) a. Canadiens–Bruins: 4:3.  
(Interpretation: The Montreal Canadiens beat the Boston Bruins by 4 goals to 3.)  
b. Happy new year!  
(Interpretation: I wish you a happy new year.)

#### 5.3 Conversational maxims (Grice, 1975)

- (27) a. Do you know what time it is?  
(Interpretation: Please tell me what the time is.)  
b. It's pretty stuffy in here.  
(Interpretation: Could you open the window?)  
c. Mary: Are you coming to the party?  
John: I have a lot of homework.  
(Interpretation: I can't come to the party.)

#### 5.4 Anaphora

- (28) Max climbed Mt. Everest, and Liz has done so, too. do-so anaphora  
(29) Max climbed Mt. Everest, and Liz has done it, too. do-it anaphora  
(30) Max broke his leg, but that didn't stop him from climbing the mountain.  
(31) Max spent the entire holiday sick, but he doesn't mind it too much. sentential anaphora

→ What is missing?

An entire clause or constituent, which are referred to by some anaphor.

### 5.5 Less clear cut cases

- (32) a. Cow attacks farmer with ax headlines  
 b. Woke up late. Had coffee. Was almost late for class. diary style writing  
 c. Cut carrots. Add jam and stir. recipes  
 d. Install update, then restart. instructions

☞ Possible paper topics:

- Learn more about a type of ellipsis that we will not discuss in class, discuss one or more analysis of this type of data.
- Learn more about something that is not usually considered ellipsis. Discuss differences between ellipsis and your phenomenon. Could it be thought of as a type of ellipsis?

## 6 Some syntactic assumptions

• Syntactic categories:

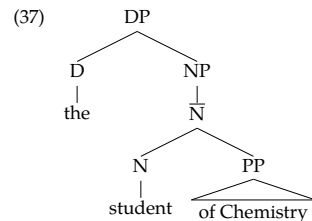
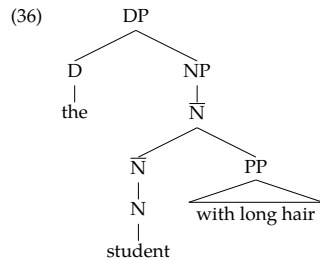
Category	Abbreviation	Examples
a. noun	N	_____
b. verb	V	_____
c. adjective	A	_____
d. preposition	P	_____
e. adverb	Adv	_____
f. determiner	D	_____
g. tense	T	_____
h. complementizer	C	_____

• Subcategorization: The lexical entry for a word contains subcategorization information about the head of its complement.

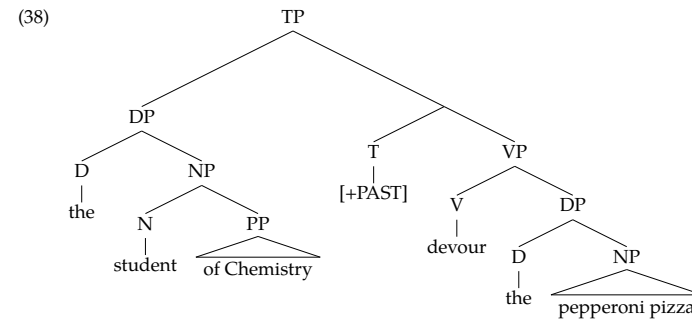
- (33) a. Mary believes **that** John left.  
 b. \*Mary believes **for** John to leave.
- (34) a. Mary arranged **for** John to leave.  
 b. \*Mary arranged **that** John left.
- (35) a. Mary talked **about** ellipsis.  
 b. \*Mary talked **on** ellipsis.

(Can you think of examples for A, N, P ?)

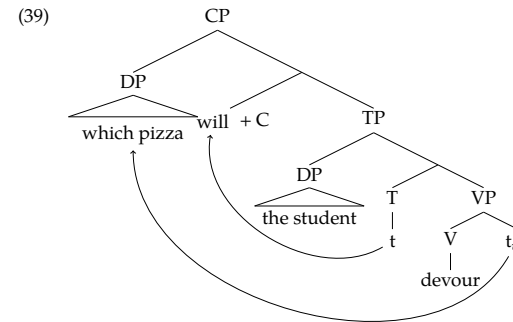
• X-bar schema: heads, bar-levels, specifiers, complements, adjuncts, maximal projections.



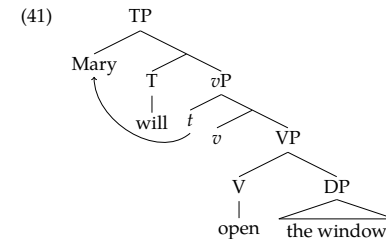
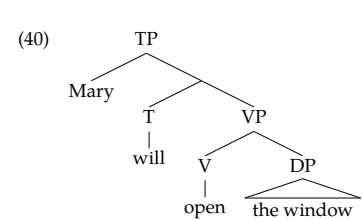
• Sentences are headed by a Tense projection (sometimes also: INFL, I).<sup>1</sup>



• Wh-movement forms a specifier of CP, and involves phrasal movement of a wh-element along with head-movement of T to C.



• The little-v hypothesis: The subject originates inside a verbal projection, below T, and (in English) moves to Spec,TP to receive Nominative Case.<sup>2</sup>



<sup>1</sup>From now on I cheat: no bar levels unless they are relevant to the point at hand.

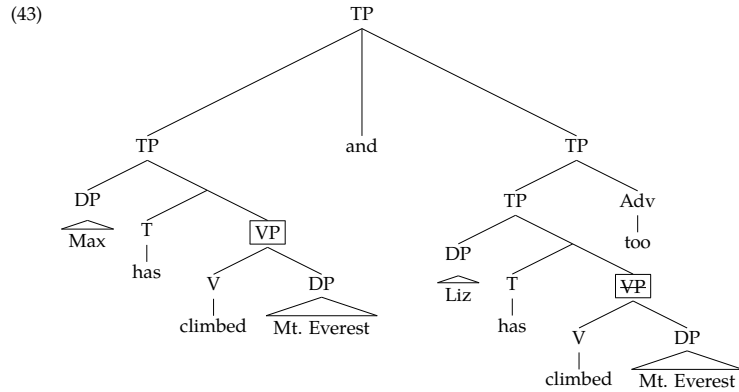
<sup>2</sup>This will show up in papers and is good to know, but I'll abstract away from this whenever possible to simplify derivations.

## 7 Variation in ellipsis

Ellipsis phenomena involve variation in the size of the elided material. Here this is demonstrated using data from other languages, in addition to English, although throughout class we will mostly concentrate on English.

### English: VP-Ellipsis

(42) Max has climbed Mt. Everest, and Liz has, too.

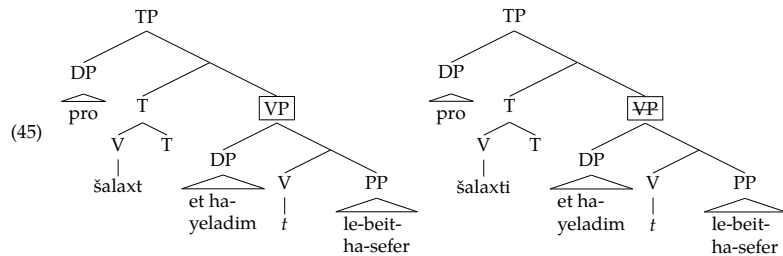


### Hebrew (V-stranding VPE)

(44) Q: šalaxt etmol et ha-yeladim le-beit-ha-sefer?  
 send.PAST.2SG.F yesterday ACC the-children to-house-the-book  
 'Did you send yesterday the children to school?'

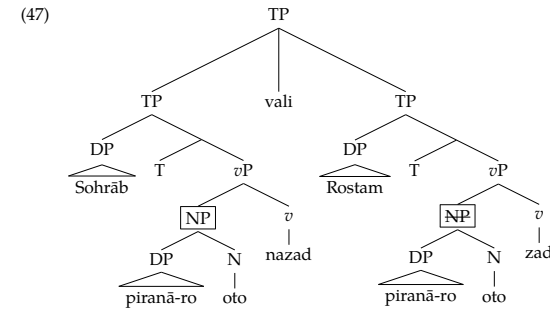
A: šalaxti Δ  
 send.PAST.1SG  
 I sent yesterday the children to school.'

(Doron, 1999, ex. 13)



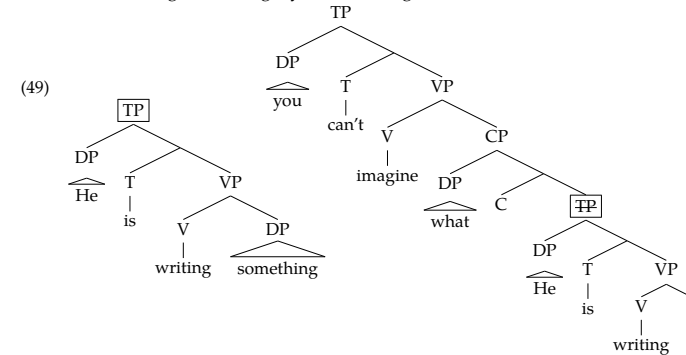
### Persian (v-stranding VPE)

(46) sohrāb pirānā-ro otu na-zad vali rostam Δ zad.  
 Sohrab shirt.PL-OBJ iron NEG-hit.PAST.3SG but Rostam hit.PAST.3SG  
 'Sohrab didn't iron the shirts, but Rostam ironed the shirts.' (Toosarvandani, 2009, p. 61)



### English: Sluicing

(48) He is writing something—you can't imagine what Δ.



## References

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