# Lexical integrity is the norm

or, "violating lexical integrity in a specific and limited way"

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# **Preliminaries**

Lexical integrity hypothesis: empirical claim vs. design choice



- Integrity is unmarked
- Apparent exceptions require explanation



- Violations are unmarked
- Apparent preference for integrity requires explanation

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# **Outline**

- Review of the data for and against LI
- Three more general arguments for LI
- Case study: coordination of prefixes

# **Evidence of LI**

- 1. **Ellipsis in coordination** (Simpson 1991: 51)
  - John liked the play, and Mary liked the movie.
  - b. \*John liked the play, and Mary disliked it.
- 2. **Modification** (Williams 2007: 384)
  - a. [How complete] are your results?
  - b. \*[How complete]-ness do you admire?
- 3. **Splitting a constituent** (Cappelle 2022: 188)
  - a. A masochist is [someone], I believe, [who likes pain].
  - b. \*Someone who likes pain is a [masoch], I believe, [-ist].
- 4. **Preposing an element** (Cappelle 2022: 188)
  - a. Down, went the weapons \_\_\_, on the ground.
  - b. \*de;-conflict \_\_\_; escalation

# **Violations of LI**

# Morphology

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**Syntax** 

- 5. Compounding (Capelle 2022: 189)
  - a.  $[[over the fence]_{pp} gossip]_{N}$
  - b. She sniffed and gave Dot a [[why-do-you-do-this-to-me]<sub>CP</sub> look]<sub>N</sub>.
- 6. Inflection (Carnie 2000: 91; www)
  - a. He [[I-don't-care] $_{IP}$ -d] $_{V}$  his way out of the room.
  - b. If you are [Thelma and Louis]<sub>NP</sub>-ing]<sub>V</sub> please keep away from the cliffs.
- 7. **Derivation** (Bruening 2018: 6; Spencer 2005b: 83)
  - a. His general [[ok-with-less-than-we-should-aim-for]<sub>AdjP</sub>-ness]<sub>N</sub> makes him an undesirable candidate.
  - b. a [why-does-it-have-to-be-me]<sub>CP</sub>-ish]<sub>Adi</sub> expression

# **Violations of LI**

Syntax (

Morphology

- 8. Coordination of prefixes (Siegel 1974: 147; Spencer 2005b: 82)
  - a. [mono- and tri]-syllabic
  - b. [pro- and en]-clitics
  - c. [socio- and politico]-economic
  - d. [pre- and even to some extent post]-war (economics)
  - e. [pro- as opposed to anti]-war
  - f. [hypo- but not hyper]-glycaemic

# **Choosing a side**

(1-4)

\*John liked the play, and Mary dis- it.

\*How completeness do you admire?

\*Someone who likes pain is a masoch-, I believe, -ist.

\*de-conflict escalation

- Impressionistically more fundamental.
- 'Core' rather than 'periphery'?

(5-8)

Over the fence gossip

He I-don't-care-d his way out of the room.
a why-does-it-have-to-be-me-ish expression
pro- as opposed to anti-war

- Impressionistically more playful.
- 'Periphery' rather than 'core'?

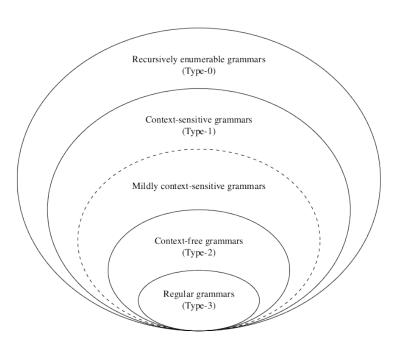
# Three more general arguments for LI

# Formal language theory

If morphology has the full power of syntax, why are there no clear morphological equivalents of unbounded or nested dependencies? [...] Similarly, why do we fail to find reduplication in the syntax, if there is no important formal distinction between morphology and syntax?

(Asudeh et al. 2013: 5)

- Morphology almost entirely finite-state
- Syntax almost entirely context-free



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# Free word order # free morpheme order

mil-es coqu-um laud-at. soldier-NOM cook-ACC praise-3SG.PRES.INDIC 'The soldier praises the cook.'

miles laudat coquum.

miles coquum laudat.

laudat miles coquum.

laudat coquum miles.

coquum miles laudat.

coquum laudat miles.

mil-es coqu-um laud-at.

\*es-mil coqu-um laud-at

\*mil-es um-coqu laud-at.

\*mil-es coqu-um at-laud.

etc.

coquum laudat miles bonum

\*coqu- laudat miles -um

# LI is the norm

Any randomly selected stretch of discourse is likely to prove that morphologically complex words stay together as undivided units and that they tend not to include any above-word-level components.

(Cappelle 2022: 204)

LI violations as % of morphologically complex words



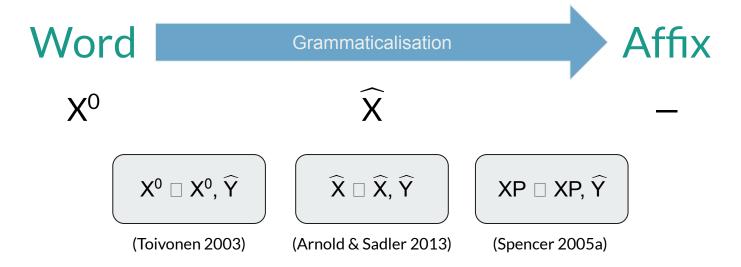
LI violations as % of all words



So how do we explain the apparent exceptions?

1%

# Non-projecting categories

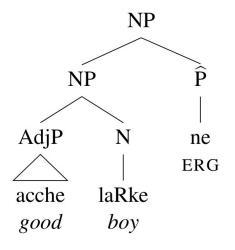


#### **Explaining apparent LI violations:**

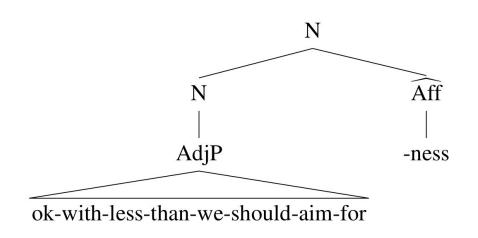
- Compounds (Lowe 2015)
- 'Phrasal affixes' (Spencer 2005a)

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# Phrasal affixes



(Spencer 2005b)



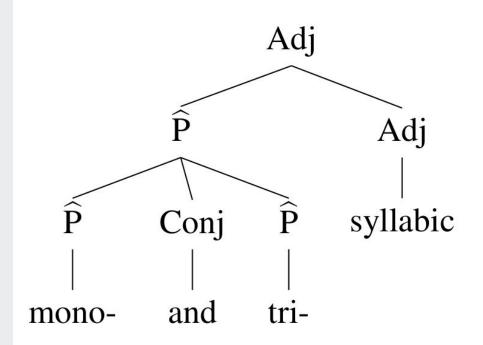
# Coordination of prefixes in English

# Simple cases

#### 9. Coordination of prefixes

- a. [mono- and tri]-syllabic
- b. [pro- and en]-clitics
- c. [socio- and politico]-economic
- d. [pre- and post]-war (economics)
- e. [pro- as opposed to anti]-war
- f. [hypo- but not hyper]-glycaemic

Spencer (2005b): "prefixoids"



# **#NotAllAffixes**

#### 10. Not all prefixes

- a. \*[un- or re]-tie
- b. \*[im- or ex]-port
- c. \*[ex- and se]-cretions

#### 11. **No suffixes** (Strauss 1982: 43)

- a. \*fear-[some and -less]
- b. \*thought-[ful and -less]
- c. \*interest-[ed and -ing]

Genuine affixes, not Xs.

□ need not attach to lexical roots

Class I vs. Class II prefixes (Siegel 1974: 115ff.)

- Class I = more affix-like
- Class II = more word-like
  - □ compounds?

#### 12. **Cf. -ish** (Norde 2010)

- a. It's easy-ish.
- b. A: Is everyone excited? B: Ish.
- c. Tomorrow's an easy day (ish): graduation audit, voice lesson, CS lab ...

# **Cross-linguistic variation**

13. German

a. ✓[Im- und Ex]-port

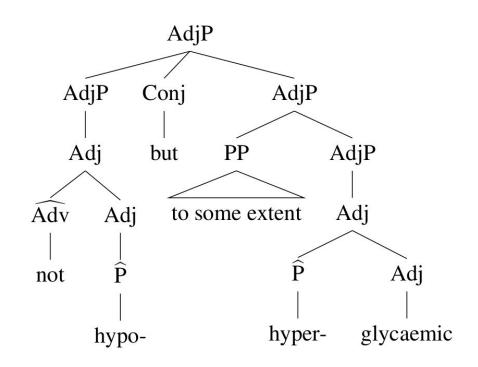
14. French

a. ?\*[mono- et tri]-syllabe

# More complex examples

#### 15. Complex cases

- a. totally pro- rather than simply not anti-Corbyn
- b. pre- as opposed to merely post-war
- c. not hypo- but to some extent hyper-glycaemic



# Full lexicalisation

For some speakers, some prefixes (esp. pre-/post- and pro-/anti-) have become fully lexicalised

#### 16. Coordination with full P

- a. Rival protests held in Croatia for and anti-abortion. (www)
- b. The main storyline is there's an opportunity for a new gas line but there's a lot of local division between those who are pro and against it. (www)
- c. Conservative MP Fiona Bruce asked the prime minister to give reassurance that the party supports the "highest standards of animal welfare" before and post-Brexit. (www)
- d. a light but effective dual purpose oil which can be used as both a <u>pre and after</u> wax treatment (<u>www</u>)

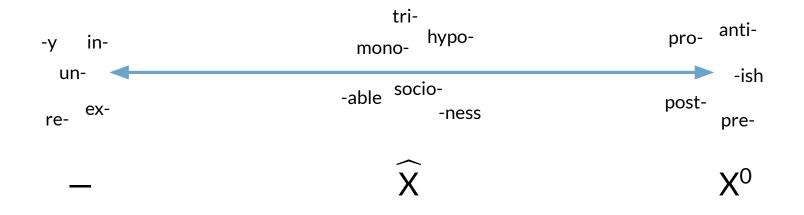
#### 17. Standalone uses

What's your stance on fox hunting?

- a. Oh, I'm totally anti! Barbaric sport!
- b. These days I'm rather pro, actually.

- 18. Attachment to phrases
  - a. pre-[founding of Rome]
  - o. post-[Alex's graduation]
  - c. I'm anti-[Heather getting with Josh].

# A spectrum of (de)grammaticalisation



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# Conclusion

# Conclusion

- Good reasons to maintain LIH.
- But if we do, then we need an account of the apparent exceptions.
  - Compounds (Lowe 2015)
  - Coordination of prefixes
  - Derivational affixes on phrases (modification of Spencer 2005a)
  - Inflectional affixes on phrases ...?
- In this view, there are no exceptions to LI: apparent exceptions are "analysed away".
- Is this question begging?
  - If it walks like a duck and quacks like a duck ...
- Given the formal and statistical arguments, the burden of proof is with the opponents of LIH.

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# Conclusion

- This is not to say that LIH-less approaches must be wrong!
- Rather, they must find ways to ensure the relevant facts are captured in the other direction (e.g. by resisting "aggressive decomposition").
- But this does make them less perspicuous.
  - LI is the norm exceptions should be explained exceptionally.
- The intermediary status of non-projecting words does this, by describing a syntactic atom which is nonetheless syntactically deficient.

# **Questions?**

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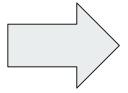
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# **More data**

- 9. Coordination of stems (cf. Spencer 2005b: 82)
  - a. [write- or print]-able
  - b. \*[irrepair- or irreplace]-able



Only words are good hosts

# More elliptical examples

- 1. Paradigm shift [from anti-] [to pro-establishment] shocks Bitcoin community. (www)
- 2. Many critically ill patients [...] will undergo transition from [early pro-] to [later anti-inflammatory] phenotypes. (www)

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