Negative and positive polarity items

In several languages, a range of items called *Negative Polarity Item*s (*NPI*s) can only occur in negative contexts

- *Herb saw any tricks

- Herb didn't see any tricks

- *Hortense gives a damn about losing an important game

- Hortense doesn't give a damn about losing an important game

- *Herb ever took lessons in how to play poker

- Herb didn't ever take lessons in how to play poker[1]

Even if the sentence contains clausal negation, as in the grammatical sentences above, NPIs cannot freely occur:

- *Anyone didn't see any tricks

NPIs can be grammatical even in the absence of clausal negation:

- No one gives a damn about losing an important game

- Few people saw any tricks

- *Many people saw any tricks

- *Some people saw any tricks

What distinguishes *some* and *many* on the one hand, and *no one* and *few* on the other? It's the different entailment patterns that these quantifiers license. Let's take two sets, one a subset of the other: {people who like to eat spinach} $\subseteq$ {people who like to eat}

- *Some* and *many* license upward entailment (i.e. from the subset to the superset), but not a downward one:

    - some people like to eat spinach $\rightarrow$ some people like to eat
    - some peple like to eat $\nrightarrow$ some people like to eat spinach
    - many people like to eat spinach $\rightarrow$ many people like to eat
    - many people like to eat $\nrightarrow$ many people like to eat spinach

- *No* and *few* license downward entailment, but not an upward one:

    - no one likes to eat $\rightarrow$ no one likes to eat spinach
    - no one likes to eat spinach $\nrightarrow$ no one likes to eat
    - few people like to eat $\rightarrow$ few people like to eat spinach
    - few people like to eat spinach $\nrightarrow$ few people like to eat[2]

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[1] Can you think of more NPIs? Do they all have the same distribution?

[2] Can you find other quantifiers that license upward or downward entailments? Quantifiers that license neither type of entailment?

NPIs are licensed by downward entailing quantifiers, such as *no* and *few*. (Is clausal negation downward entailing? Consider *I don't like to eat* and *I don't like to eat spinach*). Even if the sentence contains clausal negation or a downward entailing quantifier, as in the grammatical sentences above, NPIs cannot freely occur:

- *Anyone didn't see any tricks

- *Anyone saw few / no tricks

The relevant structural condition is c-command: the negative / downward entailing element must c-command the NPI. Does the c-command requirement on NPIs account for the following data?

- Hortense didn't give any spinach to anyone

- Hortense gave no spinach to anyone

- *Hortense gave any spinach to no one

The distribution of NPIs is not uniform across all NPI types and across all languages. Some environments where NPIs can be found are listed below.

- Clausal negation

  – Herb didn't show any feelings

- Clausal negation in a higher clause

  – Hortense didn't think that Herb should show any feelings
  – *Hortense thought that Herb should show any feelings

- Antecedent of conditional

  – If anyone notices him cheating, Herb will renounce his position

- *Only*

  – Only Hortense paid any attention

- Complement of *doubt*

  – I doubt that anyone will notice the trick

- Complement of *without*

  – Herb played without any help

- *Too*

  – Hortense is too tired to pay any attention

- Comparatives

  – Hortense is smarter than anyone would believe
  – Hortense is smarter than anyone else

- Interrogatives

  - Who won any game against Herb?

- Downward entailing quantifiers

  - Few / no people believed Hortense

- Imperatives (not downward, but irrealis context)

  - Tell me anything

- Modal constructions (not downward, but irrealis context)

  - Herb can play anytime

Apart from NPIs, there are also PPIs (Positive Polarity Items), which differ from NPIs in that they *cannot* be c-commanded by downward entailing elements.. An example is *some*, as shown below.

- Herb likes someone

- Herb doesn't like anyone (the negation of *Herb likes someone*)

- Herb doesn't like someone (not the negation of *Herb likes someone*)

Kick oneself is also a PPI

- I could kick myself

- *I couldn't kick myself (literal meaning only)