



**5. From quantity to existential quantifier?** The scope data above could be accommodated in a minimal revision of the proposal in Scontras (2017). The revised account still posits that PPQs uniformly denote quantities at the DP level, but now existential quantification can be attached to such DPs. In one implementation, quantities can be mapped to existential entity quantifiers by a silent operator, E in (12). This would allow for the wide scope reading of (10) to arise through covert quantifier raising, as in (13).

(12)  $[[E]](q)(P_{et}) \Leftrightarrow \exists x[x \text{ instantiates } q \wedge P(x)]$  (13)  $[_{DP} E [_{DP} \text{ that number of typos}]] \lambda_1 [\text{not } [Ai \text{ see } t_{1,e}]]$

**6. Quantity-only and overgeneration.** The revised uniformity account overgenerates. Under this proposal, any quantity-denoting DP  $\delta$  is expected to have a homophone that quantifies existentially over entities, viz.  $[E \delta]$ . The PPQs in (14) share a makeup not previously described, with *of* taking a wh-interrogative complement. Each of these “wh-PPQs” saturates a quantity predicate (*small*, *staggering*, *increase*), showing that they have quantity denotations. Now consider (15), which features a wh-PPQ as the complement of a quantity predicate, *estimate* in (15a), and an entity predicate, *eat* in (15b). (15b) is incomprehensible, contrasting crisply with both (15a) and (2). Apparently, E cannot attach to the PPQ in (15b). Why not? We do not see a principled answer other than that E does not actually exist in grammar.

(14) a.  $[_{DP} \text{ the number of } [_{CP} \text{ how many people die from bear attacks}]]$  is small (petkeen.com)

b.  $[_{DP} \text{ the number of } [_{CP} \text{ how many trees are cut down each year}]]$  is staggering (8billiontrees.com)

c. increase  $[_{DP} \text{ the number of } [_{CP} \text{ how many pairs you'd need}]]$  (wamaunderwear.com)

(15) a. Ai estimated  $[_{DP} \text{ the number of } [_{CP} \text{ how many nuts I ate}]]$

b. #Ai ate  $[_{DP} \text{ the number of } [_{CP} \text{ how many nuts I ate}]]$

**7. The structural ambiguity hypothesis.** We retain from the revised uniformity account the idea that PPQs are ambiguous, but we motivate a different source of ambiguity. Landman (2004) observes semantic flexibility for pseudo-partitives with container nouns like *glasses* (PPCs), as in *three glasses of wine*: PPCs can yield predication of containers (e.g., glasses), as in (16a), or of stuff measured with containers (e.g., wine), as in (16b). Building on this, Rothstein (2009) argues, based on English and Hebrew, that in addition to the polysemy of container nouns, this flexibility reflects a structural ambiguity. A PPC can be headed by the container noun, as in (17a), or by the stuff noun, as in (17b). Positing a covert indefinite determiner  $\Delta$  correctly derives existential quantification over containers for (16a) and over stuff for (16b).

(16) a. Ai broke  $[_{DP} \text{ three glasses of wine}]$ . (17) a.  $[_{DP} \Delta [_{NP} [_{MEASP} \text{ three } ] [_{NP} [_{N} \text{ glasses}]] \text{ of wine}]]]$

b. Ai drank  $[_{DP} \text{ three glasses of wine}]$ . b.  $[_{DP} \Delta [_{NP} [_{MEASP} \text{ three glasses}]] \text{ (of) } [_{NP} [_{N} \text{ wine}]]]$

If Rothstein is correct about PPCs, we are led to expect that PPQs also permit multiple structures. Specifically, her proposal invites an analysis of PPQs illustrated in (18) for *that number of nuts*. The (referential) quantity reading arises from a structure where the head of NP is the quantity noun (*number*), as in (18a), and the (existential) entity reading from a structure where the head of NP is the entity noun (*nuts*), as in (18b).

(18) a.  $[_{DP} \text{ that } [_{NP} [_{N} \text{ number}]] \text{ of nuts}]] \rightsquigarrow$  quantity reading

b.  $[_{DP} \Delta [_{NP} [_{MEASP} \text{ that number}]] \text{ (of) } [_{NP} [_{N} \text{ nuts}]]]] \rightsquigarrow$  entity reading

**8. Challenges met.** The undergeneration and overgeneration challenges for the uniformity hypothesis that we identify above are avoided under the ambiguity approach. Wide scope of the existential quantification for the PPQ in (10) falls out from the generalization, illustrated by the baselines in (8), that existential plural indefinites modified by measure phrases in general permit wide scope (cf., e.g., Ruys 2006). The unavailability of an entity reading in (15) follows from the fact that the syntactic form of wh-PPQs does not furnish an entity predicate (e.g., *nuts*) as a viable head noun for NP.

**9. Outlook.** To match the coverage of Scontras (2017) under the structural ambiguity approach to PPQs, an obvious remaining task is to detail the semantic composition for structures like those in (18), as well as the corresponding structures for PPQs with modifiers following the entity noun, like *the number of nuts I ate* or *the number of nuts in the bag*. One hypothesis invited by the wh-PPQ data in (14) is that quantity readings crucially invoke the grammar of wh-interrogatives. This may help capture von Stechow et al.’s (2014) observation that PPQs can reference the same notion of *maximality* as wh-interrogatives (Dayal 1996).

## References

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