

The internal syntax of Q-words

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1. Proposal. The main claims argued for in this paper are that 1) quantity words (MUCH/MANY, LITTLE/FEW) (Rett 2016, henceforth Qs) are hybrids combining features of the extended adjectival and nominal functional projection line, explaining their broad syntactic distribution (cf. Solt (2015b)); 2) the properties of the negative Qs FEW/LITTLE cannot be fully captured by the semantic notion downward entailment (Ladusaw 1979), but require the postulation of a Neg-feature in their internal syntax. Both claims are supported by evidence from the literature, and a typological sample of Q-words. A decomposition of Qs in nanosyntactic terms is proposed, capturing language variation in terms of the size of lexically stored trees (Starke 2014).

2. The data I: Qs as categorially hybrid. *2.1 Adjectival properties.* Qs can be used as attributive adjectives and in predicative position, (1) (Solt 2015a:222); they have comparative and superlative forms (*more/less/fewer*), and share the semantics of gradable adjectives, i.e. their interpretation relies on a contextual dimension, cf. (2) (Partee 1989). *2.2 Adverbial properties.* Qs can be adjectival and verbal modifiers (3). *2.3 Numeral properties.* Qs are in complementary distribution with numerals (4) (Barbiers 2007). *2.4 Nominal properties.* Qs sometimes reveal the mass-count distinction (5). *2.5 Quantifier properties.* Qs can interact scopally.

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|---------|---|--------|--|--|---------|------|------|-----|--------|---------|-------|--------|----|------|------|--------|-----|-----|------|
| (1) | a. John’s friends are many/few.
b. The many/few students who attended enjoyed the lecture. | (4) | *these five many books | | | | | | | | | | | | | | | | |
| | | (5) | | <table border="1" style="border-collapse: collapse; text-align: center;"> <tr> <td style="padding: 2px;">English</td> <td style="padding: 2px;">many</td> <td style="padding: 2px;">much</td> <td style="padding: 2px;">few</td> <td style="padding: 2px;">little</td> </tr> <tr> <td style="padding: 2px;">Swedish</td> <td style="padding: 2px;">många</td> <td style="padding: 2px;">mycket</td> <td style="padding: 2px;">få</td> <td style="padding: 2px;">lite</td> </tr> <tr> <td style="padding: 2px;">≠Hoã</td> <td style="padding: 2px;">kí-joa</td> <td style="padding: 2px;">kăo</td> <td style="padding: 2px;">xòa</td> <td style="padding: 2px;"> x’úi</td> </tr> </table> | English | many | much | few | little | Swedish | många | mycket | få | lite | ≠Hoã | kí-joa | kăo | xòa | x’úi |
| English | many | much | few | little | | | | | | | | | | | | | | | |
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| (2) | Many arrows hit the target, but many didn’t. | | | | | | | | | | | | | | | | | | |
| (3) | a. John drove much faster than Sue.
b. John sleeps little. | (6) | a. Not many arrows hit the target
b. Many arrows didn’t hit the target. | | | | | | | | | | | | | | | | |

3. The data II: [Neg] in *few/little*. *3.1. Typological data.* Many languages do not have opaque negative Qs (henceforth NQs) like *few/little*, but express the meaning of negative Qs by means of negation and a positive Q (henceforth PQs); some representative examples are given in table 1, (7). *3.2. Co-occurrence restrictions: *Neg-Neg.* *3.2.1.* Languages with morphologically opaque NQs show a polarity restriction in their use of LITTLE as adjectival modifier: while LITTLE can modify positive adjectives, it cannot modify negative ones, cf. (8). This restriction can be attributed to the fact that both NQs and negative adjectives contain a Neg feature, and that the local co-occurrence of this Neg feature is ruled out. *3.2.2.* A similar pattern can be observed with FEW (Collins 2016). Whereas it is possible to DP-internally negate *many*, this is not possible with *few*. This asymmetry can also be explained by a constraint against the local co-occurrence of two Neg features. *3.3. NPIs, inversion, question tags.* Like regular sentential negation, *few* licenses NPIs, gives rise to inversion and triggers positive question tags. Moreover, data like (9b), where the upward entailing QP *no fewer* licenses inversion, suggests that the Neg feature is responsible for the inversion, though not downward entailing (Collins & Postal 2014:135). *3.4. Split scope facts* provide a strong case for the decomposition of FEW (Zeijlstra 2011).

Table 1	MANY/MUCH		FEW/LITTLE		S-NEG
	count	mass	count	mass	
Malagasy	betsaka		vi- tsy	kely	tsy
N Sotho	-ntši		se-kae	-nnyane	se
Wolof	bëri		bëri-wul	tuuti	-u(l)
Hixkaryana	thenyehra		yak- hera	-	- hira
Japanese	yake ? takusan		hotondo+wh+mo+ nai suku- nai		- nai
Garifuna	g-ibe- sarágu		m-ibe mama sarágu		m-(a)
Western Armenian	ad		ki-t		t(i/)

(7)

(8)	LITTLE A_{POS}	LITTLE A_{NEG}	
Dutch	weinig geloofwaardig	*weinig ongeloofwaardig	‘(in)credible’
French	peu crédible	*peu incroyable	

- (9) a. (Not)many/(**Not*)few people were there.
 b. No fewer than three gorillas were they able to teach French to.

4. Analysis. *4.1 The feature system.* The hybrid behaviour of Q-words suggests that they are to be decomposed into features that they share with the adjectival (Corver 1997) and nominal functional domain (Borer 2005), (11)

These features in (9) are arranged into a functional sequence, (10), giving the internal structure for PQs and NQs in English (11) and Dutch (12), each of which spell out a subconstituent of the f_{seq} in (10).

- (10) a. [_{SprIP} Sprl [_{CmprP} Cmpr [_{#P} # [_{DivP} Div [_{QP} Q]]]] (PQs)
 b. [_{SprIP} Sprl [_{CmprP} Cmpr [_{#P} # [_{DivP} Div [_{NegP} Neg [_{QP} Q]]]]]] (NQs)

(11)	Adjectives	SPRL	CMPR		Q	✓
	Nouns			#	Div	✓
	Q-words	SPRL	CMPR	#	Div	Q

- (12) much [_{QP} Q] (12) veel [_{#P} # [_{DivP} Div [_{QP} Q]]]
 many [_{#P} # [_{DivP} Div [_{QP} Q]]] weinig [_{#P} # [_{DivP} Div [_{NegP} Neg [_{QP} Q]]]]
 little [_{NegP} Neg [_{QP} Q]]
 few [_{#P} # [_{DivP} Div [_{NegP} Neg [_{QP} Q]]]]

4.2 Facts explained. The semi-functional nature and syntactic flexibility of Qs is due to their lack of a root feature. Gradability is contributed by the Q-feature. The features CMPR and SPRL explain the presence of degree comparison. The presence of # and Div accounts for the mass-count distinction, (5); # explains the incompatibility with numerals. Mass-count syncretisms (table 1 / (12)) are accounted for by the Superset Principle, which lets a lexical item spell out a syntactic tree that it contains. The Neg feature in the negative series accounts for the properties in section 3. The contrast between (9a) and (9b) is due to CMPR intervening between the two Neg features (**NEG-NEG* vs *NEG-CMPR-NEG*).

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