The internal syntax of Q-words

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Abstract This paper aims at describing Q(uantity)-words, i.e. MANY/MUCH and FEW/LITTLE, from a typological perspective, and presenting typological generalisations based on it. The typological sample provides support for a mass-count and positive-negative dimension in the domain of Q-words. Both dimensions also intersect. Along the negative dimension, it seems that languages fall into two groups: those having an opaque strategy for FEW/LITTLE and those having only an analytic strategy (NOT-MUCH/MANY). Four patterns can be discerned on the basis of the sample, which are each exemplified by means of one language, i.e. English, Dutch, Wolof and Western Armenian. In addition, I make an attempt at developing a nanosyntactic analysis of the data, which aims to show how language variation in the domain of Q-words can be accounted for in terms of varying the size of lexically stored trees (Starke 2014). Finally, I show how one missing type of pattern is underivable on the basis of the analysis proposed.

Keywords: Q-words, typological sample, negation, syntax, nanosyntax

1 Introduction

MANY/MUCH and FEW/LITTLE belong to a group of quantifiers that has been referred to as semi-lexical categories (Corver & van Riemsdijk 2013), degree determinatives (Huddleston & Pullum 2002:393), vague quantifiers or value judgement quantifiers (Partee 1989; Keenan & Paperno 2012), Q-adjectives (Solt 2015) or Quantity-words (Rett 2016). I will adopt the term Q(uantity)-words for the remainder of this paper.

The reason for these various labels are the diverse distributional properties of these words, which share characteristics with adjectives, nouns, numerals, and quantifiers. Adjectival characteristics include the presence of comparative and superlative forms (e.g. *more/most* and *less/least*). They can be used predicatively and attributively, with certain language-specific restrictions (such as the fact that English mass Q-words cannot be used in predicative position, (2)):

(1) a. John's friends are many/few. (predicative)

b. The many/few students who attended enjoyed the lecture. (attributive)

(2) a. *The water in the bucket was much/little. (predicative)

b. The little/*much water in the bucket. (attributive)

A further property that Q-words share with gradable adjectives is that their interpretation relies on a contextual dimension, i.e. the context determines the standard for what is perceived as MUCH/MANY and LITTLE/FEW (Partee 1989). Both the positive Q-words and the negative Q-words (henceforth NQ-words) share this property of denoting a vague quantity.

A somewhat underreported use of Q-words is their ability to function as adjectival modifiers; this use is subject to various polarity restrictions, such as the fact that MUCH cannot be used in attributive position with adjectives in the equative degree, but LITTLE can, e.g. French *peu* 'little', as illustrated in (3), whereas both MUCH and LITTLE can be used with the comparative degree, (4):

(3) *Jacques est peu intelligent.*
Jacques is little intelligent
'Jacques is not intelligent.'

(4) John drove much/little faster than Sue.

The mass Q-word can also be used as adverbial with verbal predicates:

(5) a. John sleeps little.

b. Does John sleep much?

A nominal characteristic of Q-words is the fact that in some languages (like English) they have separate items for mass and count. In languages that do not have specific count Q-words, like Romanian, the mass-count distinction can sometimes be tracked by means of plural morphology (p.c. Sebastian Bican and Carmen Florina):

(6) a. *mult nisip*
much sand.M

b. *mulț-i studenț-i*
many-PL student-M.PL

c. *mult-e student-e*
many-PL student-F.PL

Their incompatibility with cardinal numerals suggests that they also have numeral properties:

(7) a. these many books
b. these three books
c. *these three many books

Finally, Q-words can also scopally interact with other quantifiers, a property they share with quantifiers like *all, every, etc.*. I will not discuss this in the present paper and refer the reader to Beghelli (1995) and Heim (2006), and references cited there. This overview of the essential uses of Q-words is far from exhaustive. For more examples and discussion, I refer to Solt (2015:221); Rett (2016).

The structure of this paper is as follows. In section 2, a sample of typological data will be discussed and four typological patterns will be identified. These patterns will be the input for the feature system underlying Q-words, which will be set up in section 3. In section 4, a nanosyntactic analysis will be provided for three different typological patterns in the sample, of which English, Dutch and Wolof are representatives. Section 5 summarizes and concludes.

2 The data

When it comes to how the grammar of Q-words is organised, languages make choices within two cross-cutting domains, the mass/count distinction on the one hand, and the positive/negative distinction on the other. The cross-section of these two distinctions yields the following matrix of oppositions:

(8)

	count	mass
positive	MANY	MUCH
negative	FEW	LITTLE

These oppositions are subject to cross-linguistic variation along the following parameters. With respect to the mass-count distinction, Q-words can be syncretic or not. If they are syncretic, the syncretism can stretch along the positive dimension of the scale, along the negative dimension or along both. As far as negation is concerned, languages may make use of overt negative morphology, and hence be analytic, or they may have an opaque form.

Table 1 illustrates positive and negative Q-words in 21 different languages, ranging from language families as diverse as Indo-European (English, Swedish, Dutch, French, Romanian, Italian, Greek, Western Armenian and Czech), Finno-Ugric (Hungarian), Dravidian (Telugu), Semitic (Hebrew), Austronesian (Malagasy), Niger-Congo (Wolof and Northern Sotho), San (Hòã), Altaic (Japanese), Sino-Tibetan (Chinese), Arawakan (Garifuna), Caribbean (Hixkaryana), and Uto-Aztecan (Tümpisa).[1] Even though the language sample is small, it is highly diversified, with languages from different phyla, following sampling methods discussed in Rijkhoff et al. (1993), and Baker & McCloskey's (2007) Middle Way approach to typologically driven theoretical research.

There seem to be three restrictions with respect to NQ-words, which I formulate as (tentative) implicative universals below:

(9) a. If a language has only analytic NQ-words, the negative marker used in the formation of the analytic NQ-word is syncretic with the sentential negative marker.
b. If a mass NQ-word is analytic, the count NQ-word is also analytic.
c. If a mass NQ-word is analytic, it is syncretic with the count NQ-word.
d. If a language has an analytic NQ-word, the positive dimension is syncretic between count and mass.

The typological sample offers four distinct patterns with respect to the parameters of variation just discussed. In what follows I discuss these four patterns and zoom in on one language per pattern: English, Dutch, Wolof and Western Armenian.

2.1 Pattern 1: English

A language that is fully non-syncretic for mass and count along the positive and negative dimension and that makes use of opaque forms for NQ-words is English. The pattern is schematically illustrated in (10).

[1] Derbyshire (1979)'s grammar of Hixkaryana does not describe which word is used to express LITTLE in Hixkaryana. This makes it hard to group Hixkaryana with one of the patterns described in this section.

	MANY/MUCH		FEW/LITTLE		S-NEG
	count	mass	count	mass	
English	many	much	few	little	not
Swedish	många	mycket	få	lite	inte
Hòã	kí-ǰòa	kǎo	xòa	|x'ǔi	|hò'õ
Dutch	veel		weinig		niet
Hebrew	meat		harbe		lo
Mandarin	d*ūo*		shǎo		bù
Czech	mnoho		málo		ne
French	beaucoup		peu		pas
Romanian	mult-		puțin-		nu
Italian	molt-		poc-		non
Greek	pol-		líg-		dhen
Hungarian	sok		keves		nem
Tümpisa	so'oppüh		tütüttsi(ttsi)		ke
Telugu	ĕk:ŭvă/čaala		tăk:ŭvă		le-
Malagasy	betsaka		vi-**tsy**	kely	**tsy**
N Sotho	-ntši		**se**-kae	-nnyane	**se**
Wolof	bëri		bëri-w**ul**	tuuti	**-u(l)**
Hixkaryana	thenyehra		yak-**hera**	-	**-hira**
	yake	?			
Japanese	takusan		hotondo+wh+mo+**nai**		**-nai**
			suku-**nai**		
Garifuna	g-ibe-sarágu		**m**-ibe mama sarágu		**m-(a)**
Western Armenian	ʃad		ki-**tʃ**		**tʃ(i/ə)**

Table 1: Typology of Q-words.

(10)

	count	mass
positive	many	much
negative	few	little

The distribution of English *many/much* and *few/little* was already briefly discussed in section 1. Other languages instantiating this pattern include Swedish and Hòã. Wierzbicka (1996:44-45) suggests that it is typologically rare to have a mass/count distinction in the domain of Q-words.

2.2 Pattern 2: Dutch

The pattern we see in Dutch is schematized in (11). Both the positive and the negative dimension have a syncretic marker and the NQ-word is opaque.

(11)

	count	mass
positive	veel	veel
negative	weinig	weinig

For reasons of space, I do not give any further Dutch examples here, but Dutch Q-words can for the most part be used like the English ones, i.e. as quantifiers, in attributive and predicative position and as adverbs. Other languages in the sample instantiating this pattern include French, Romanian, Italian, Greek, Czech, Hungarian, Hebrew, Mandarin, Tümpisa, and Telugu.[2]

2.3 Pattern 3: Wolof

The third pattern in the sample is exemplified by Wolof. In this pattern, positive Q-words are syncretic for the mass-count distinction, whereas the NQ-words show a split: the count word is analytic and the mass form is opaque.

(12)

	count	mass
positive	bëri	bëri
negative	bëri-wul	tuuti

[2] As noted earlier with respect to Romanian, some languages track the count-mass distinction by plural/singular number agreement (e.g. Greek, Italian). I consider this to be a fact of the agreement marker, and I take the Q-words in these languages to be syncretic.

MANY/MUCH in Wolof is expressed by means of a stative verbal predicate in a relative clause construction (Tamba et al. 2012:927):

(13) a. *Góór y-u bëri d-u-nu tux.*
man CLF.PL-C_{Rel} BE.MANY IPFV-NEG-3PL smoke
'Many men don't smoke.'

b. *Xadi gis-na góór y-u bëri.*
Xadi see-FIN man CLF.PL-C_{rel} BE.MANY
'Xadi saw many men.'

(14) a. *Xadi naan-na meew m-u bëri.*
Xadi drink-FIN milk CLF-C_{rel} BE.MUCH
'Xadi drank a lot of milk.'

b. *Meew m-u bëri tuur-u-na.*
milk CLF-C_{rel} BE.MUCH spill-REFL-FIN
'A lot of milk spilled.'

For FEW/LITTLE a different quantificational expression is used with mass and count nouns. With count nouns a transparent construction is used, with the sentential negative marker *-u(l)* and the verbal predicate *bëri* 'many' (Tamba et al. 2012:927).[3]

(15) *Xaj y-u bëri-wul mën a jáng.*
dog CLF.PL-C_{REL} BE.MANY-NEG can INF read
'Few/Not many dogs can read.'

With mass nouns the adjectival predicate *tuuti* 'little, small' is used; (16a) illustrates *tuuti* as the adjective 'small', and (16b) as the quantifier meaning 'little' (Tamba et al. 2012:928).

(16) a. *Xaj b-i am-na nopp y-u tuuti.*
dog CLF-DEF/PROX have-FIN ear CLF-C_{REL} small
'The dog has small ears.'

b. *Xadi lekk-na tuuti ceeb.*
xadi eat-FIN small rice
'Xadi ate some/little rice.'

Other languages instantiating this pattern include Malagasy and N Sotho.

[3] There are two other ways of expressing sentential negation: by means of two auxiliaries *bãn/ñákk* and by means of *d-u*. I will not discuss these strategies here. The regular sentential negative marker is *-u(l)*, which drops the final *-l* when it precedes subject markers or clitics. cf. Torrence (2013) for more details on negation in Wolof.

2.4 Pattern 4: Western Armenian

The pattern exemplified by Western Armenian displays a count-mass syncretism along the positive and the negative dimension, and an analytic negative marker.

(17)

	count	mass
positive	ʃad	ʃad
negative	ki-tʃ	ki-tʃ

The quantifier *ʃad* 'much/many' in Western Armenian can be used to quantify over mass and count nouns, both independently, as a modifier (18a) and (18b), and as an adverb (18c) (Khanjian 2012:848).

(18) a. *ners-ə ʃad mart gar*
inside-DEF MANY man ∃.PST.3S
'There were a lot of people inside.'

b. *ʃad-(mə) aʃagerd-ner dun ka-ts-in*
MANY-INDEF student-PL house go-PST-3PL
'Many students went home.'

c. *ʃad χəme-ts-ir?*
MUCH drink-PST-2S
'Did you drink a lot?'

I want to propose that what at first sight looks like a monomorphemic and opaque quantifier, i.e. *kitʃ* 'few/little', actually consists of the sentential negative marker *tʃ-* and an opaque morpheme *ki-*. A similar analysis could be proposed for the more obviously decomposable *vo-tʃ* 'no' (Khanjian 2012:847ff).

(19) a. *kitʃ-(mə) aʃagerd dun kəna-ts.*
FEW-INDEF student house go-PST.3S
'A small amount of students went home.'

b. *kitʃ kini*
some wine

c. *kitʃ χəme-ts-ir?*
FEW drink-PST-2S
'Did you drink a little?'

Other languages that show this pattern include Garifuna and Japanese.

3 The feature system of Q-words

Based on the typological evidence presented in the previous section, the attested patterns and arguments from the literature, I propose that the functional sequence of Q-words consists at least of a Q feature (standing for a scalar Quantity), a Div feature (Divider), a Num feature (Numeral), and a Neg feature (Negation).

Before I discuss the these four different features in more detail, I want to briefly discuss the categorial nature of Q-words. As we saw in section 1 above, Q-words share properties with adjectives, adverbs, quantifiers, nouns, and numerals. I suggest that this behaviour follows from the fact that they lack what defines rich lexical items, namely a root feature, and consist uniquely of functional material, i.e. the features that otherwise make up the functional superstructure of lexical categories. Q-words have a Q as their anchor, a feature that is compatible with adjectival, verbal and adverbial categories (see Neeleman et al. 2006 for more discussion of cross-categorial modifiers). Schematically, the situation can be represented as in (20), which shows the structure of the adjectival f_{seq} on the first line, the nominal one on the second, and the Q-words on the third (for Cmpr and Sprl, see Bobaljik 2012).[4]

(20)

Adjectives	Sprl	Cmpr			Q	√
Nouns			Num	Div		√
Q-words	Sprl	Cmpr	Num	Div	Q	

The Q-feature contributes scalarity or gradability (De Clercq 2013; 2017). Q is a feature that has its origin in the (Split) Degree Hypothesis (Bresnan 1973; Corver 1997). Corver introduced Q as part of the extended functional projection of adjectives, where it served as the host for such adjectival modifiers as *much, more, less, enough*. The other projection in the extended functional projection line of AP is DegP, which hosts elements like *how, so, that*, etc., and which I will not discuss in any detail in the present paper. Unlike Corver, I argue that the elements which he argues are merged in Q consist of a Q-feature, i.e. Q is part of their internal structure.

Whereas Q is a necessary feature to express scalar quantity, the Div feature is a crucial ingredient of any Q-word associated with countable or 'individuated' nominals (Cowper & Hall 2012). Div is responsible for cutting up the mass in plural mass (cf. Borer's 2005 work on

[4] Cmpr and Sprl are part of the extended projection of adjectives. These labels refer to a comparative and superlative feature respectively. However, I do not elaborate on these features in the present paper.

the extended functional projection line of NP). Borer thus argues for a structural account of the mass/count distinction.[5] The sample in 1 provides immediate support for a mass-count distinction within the system of Q-words: English, Swedish and Höã use morphologically different forms to distinguish between mass and count. Malagasy, Northern Sotho and Wolof show a mass-count distinction along the negative dimension.

The cardinality feature Num is responsible for assigning a specific quantity to the pluralized or individuated mass (Borer 2005; sometimes represented as # in the literature, e.g. Ritter 1992). The presence of the Num feature accounts for the numeral characteristics of Q-words, in particular their incompatibility with cardinal numerals (see (7) above). In some languages Num is (also) realized as number agreement with the noun, as illustrated for Rumannian (6).

NQ-words differ from positive Q-words in the presence of a Neg feature. Support for this feature comes from languages in the sample with an overt negative marker to express the meaning of FEW/LITTLE, i.e. the languages which have a morpheme bold-faced in the FEW/LITTLE-column in table 1. More support for the presence of syntactic Neg in non-analytic languages comes from three tests: the question tag test (Klima 1964; (21a)), the inversion test (see (21b)), and the NPI-licensing test (see (21c)).

(21) a. Few government representatives visited the colonies this year, did they? (Brasoveanu et al. 2014:188)

b. Very few people would they admit to their club. (Collins & Postal 2014:138)

c. Few changes have ever taken so many people by surprise. (Quirk et al. 1985:780)

For LITTLE as well, it has been shown by De Clercq & Vanden Wyngaerd (2017:157) that there is reason to assume the presence of a Neg feature even in those languages which show no overt morphological marking of negation. The evidence comes from the combination of LITTLE in French and Dutch with negative gradable predicates. Both in French and Dutch *peu* and *weinig* are incompatible with negative gradable predicates, as illustrated by the examples in (22)-(28b).

[5] Unlike Borer I will not use ClP (ClassifierPhrase) to refer to the phrase headed by Div, but DivP.

(22)

	tolérant/*intolérant	‘tolerant/intolerant’
peu	patient/*impatient	‘patient/impatient’
	content/*mécontent	‘satisfied/dissatisfied’

(23)

	interessant/*saai	‘interesting/boring’
weinig	duidelijk/*onduidelijk	‘clear/unclear’
	geduldig/*ongeduldig	’patient/impatient’

De Clercq & Vanden Wyngaerd (2017) explain this as a consequence of a restriction on permissible functional sequences: two adjacent negative heads are not permitted in the functional sequence. Assuming both negative adjectives and the modifier *weinig/peu* ‘little’ to contain a Neg feature, they explain the contrast in (23) as a violation on this restriction in the functional sequence.

Summarising, Q-words contain at least a Q, Div and Num feature, as well as a Neg feature in the case of NQ-words. In the next section I will propose an analysis which captures the existing patterns discussed in section 2 and shows how language variation derives from the size of lexically stored trees (Starke 2014). Moreover, the analysis also accounts for one unattested pattern.

4 Analysis

I first briefly introduce nanosyntax; next I discuss in more detail how some of the different patterns discussed above can be derived within a nanosyntactic system.

4.1 Prerequisites for the analysis

The analysis presented in this paper is couched in the nanosyntactic framework (Starke 2009; 2014; Caha 2009). Nanosyntax has a postsyntactic lexicon, which contains lexical trees, which are themselves created by syntax. Spellout is cyclic and phrasal. After each Merge step, the lexicon is checked at the level of the phrase. Whenever the lexicon has a matching lexical item, the lexical item can be inserted. If there is no identical match, the Superset Principle and the Elsewhere Condition govern lexical insertion. If no match can be found, movement is allowed in order to spellout the newly merged feature.

(24) *Superset Principle* (Starke 2009:3)
A lexically stored tree matches a syntactic node iff the lexically stored tree contains the syntactic node.

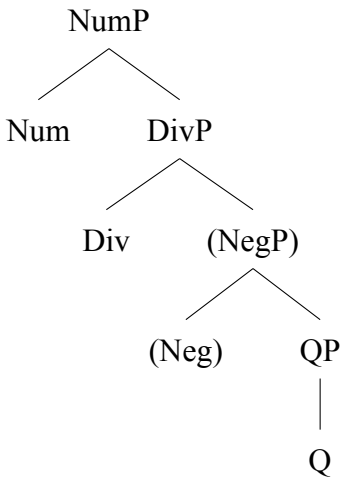
(25) *Elsewhere Condition* or *Minimize Junk* (Caha 2009:18)
In case two rules, R1 and R2, can apply in an environment E, R1 takes precedence over R2 if it applies in a proper subset of environments compared to R2.

I will explain how spellout works in more detail when I present the analysis. For more information on the model itself, I refer the reader to Starke (2009); Baunaz et al. (to appear).

4.2 The grammar of Q-words

The basic functional sequence of Q-words is depicted in (26):

(26)



In what follows I discuss in more detail three patterns of the four discussed above: (i) one with syncretic and opaque Q-words (Dutch), (ii) one with non-syncretic and opaque Q-words (English), and (iii) one with an analytic count Q-word along the negative dimension (Wolof); for reasons of space, I must refrain from discussing the fourth pattern. In addition, I briefly point out how this fseq cannot derive some of the unattested patterns listed in (9).

The lexical items of English Q-words are in (27). The lexicon of English contains four Q-words, given that English has distinct lexicalisations for the four cells of the matrix structure of the Q-words.

(27) a. $<$ /much/, [$_{QP}$ Q] $>$

b. < /many/, [$_{\text{NumP}}$ Num [$_{\text{DivP}}$ Div [$_{\text{QP}}$ Q]]] >

c. < /little/, [$_{\text{NegP}}$ Neg [$_{\text{QP}}$ Q]] >

d. < /few/, [$_{\text{NumP}}$ Num [$_{\text{DivP}}$ Div [$_{\text{NegP}}$ Neg [$_{\text{QP}}$ Q]]]] >

In terms of the tree in (26), it is easy to see that *much* spells out QP, *little* NegP, *many* NumP, and *few* the entire tree. In the case of *much* and *little*, there is a competition: the syntactic tree for *much* is the QP subtree of (26); in the case of *little*, it is the NegP subtree of (26). In either case, there is a competitor due to the Superset Principle: for *much*, both (27a) and (27b) are candidates, and for *little*, both (27c) and (27d) are. However, thanks to the Elsewhere Principle, (27a) wins against (27b), since it is a closer match for the syntactic tree; similarly, (27c) wins against (27d).

For the Dutch pattern, deriving the syncretism in the positive and negative Q-words is straightforward, given the following lexical entries for *veel* and *weinig*.[6]

(28) a. < /veel/, [$_{\text{NumP}}$ Num [$_{\text{DivP}}$ Div [$_{\text{QP}}$ Q]]] >

b. < /weinig/, [$_{\text{NumP}}$ Num [$_{\text{DivP}}$ Div [$_{\text{NegP}}$ Neg [$_{\text{QP}}$ Q]]]] >

Veel (28a) can spell out either NumP, or a tree just consisting of QP , thanks to the Superset Principle. This accounts for the mass/count syncretism. *Weinig* (28b) can also spell out the syntactic structure for a mass NQ-word and the structure for a count NQ-word, i.e. either the NegP or the NumP part of (26).

In Wolof the situation is quite different, at least for the negative items: the negator responsible for sentential negation is part of the structure of the negative count Q-word. The lexical item for *bëri* 'many/much' is in (29).

(29) < /bëri/, [$_{\text{NumP}}$ Num [$_{\text{DivP}}$ Div [$_{\text{QP}}$ Q]]] >

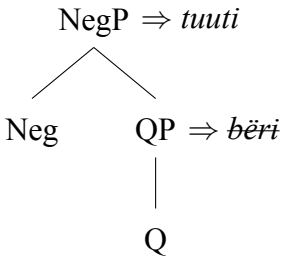
This lexical item can capture the syntactic structures for count and mass, as already illustrated for *veel* 'many/much' above.

The situation with respect to the lexical item for LITTLE is similar to the English pattern. The item in (30) is the only match when syntax merges the structure in (31).

[6] See Ruys (2017), Barbiers (2007) and Broekhuis & den Dikken (2012:925) for more extensive discussion of *veel*.

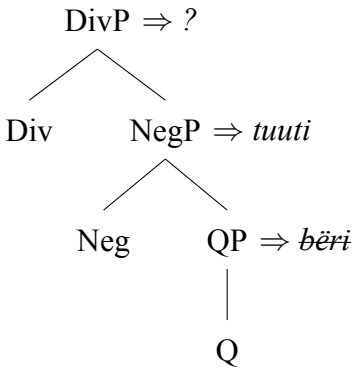
(30) < /tuuti/, [$_{\text{NegP}}$ Neg [$_{\text{QP}}$ Q]] >

(31)



Now when syntax merges the structure for a count NQ-word, *bëri* will be inserted at the level of QP due to the Superset Principle. At the level of NegP *tuuti* will be inserted and *bëri* will be overwritten. However, at the level of DivP there will be no spellout available, since there is no lexical item in Wolof that spells out this structure.

(32)



The nanosyntactic spellout algorithm (Starke to appear) goes through a number of consecutive steps to arrive at a spellout: simple phrasal spellout (of DivP) is tried first, but if this fails, spellout driven movement applies. This moves the complement of the head Div to its spec, and checks if there is a spellout for DivP (excluding its spec). The purpose of this step is to check if the lexicon contains an affix that spells out (only) the Div feature. Again, spellout will fail, since no lexical item in Wolof spells out [$_{\text{DivP}}$ Div]. The only way to spell out the Div feature in Wolof is by means of the positive Q-word *bëri* 'much/many'. The NQ-word is derived from this by means of an affix that spells out Neg. To arrive at this spellout on the basis of the structure in (32) is, however, impossible. In order to get a converging derivation, therefore, (32) must first be undone. Technically, this is achieved by a backtracking derivation, i.e. previous Merge steps are erased, and a different derivation is attempted. In this case, the features Div and Neg are erased from the derivation, and Div is merged again. The lexicon of Wolof now has a spellout,

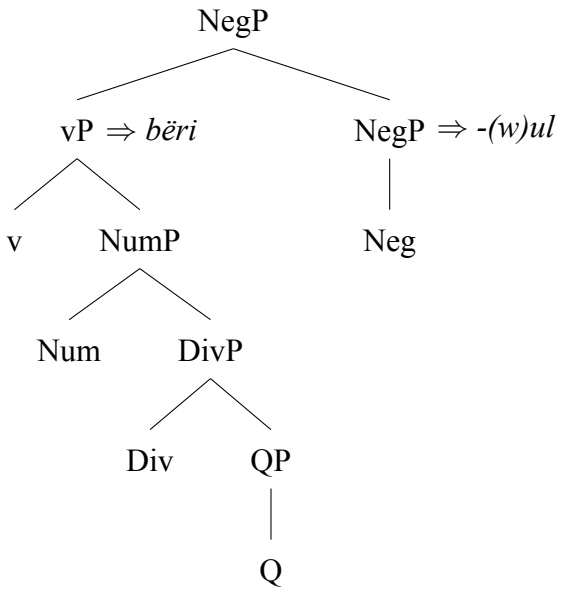
i.e. *bëri*, which will also be the spellout at NumP. Subsequently, v is merged, creating vP, which also spells out as *bëri* (recall that *bëri* is a stative verbal predicate).

The next step is to merge Neg at this higher level, and add a spellout for Neg. In Wolof, the Neg affix *-(w)ul* is available, which also functions as a negative marker with sentential scope. I represent its lexical entry as in (33) (I adopt the account for the internal structure of negative markers presented in De Clercq 2013; 2017).

(33) < /u(l)/, [$_{TP}$ T [$_{FocP}$ Foc [$_{DivP}$ Div [$_{QP}$ Q [$_{NegP}$ Neg]]]] >

The lexical entry is overspecified; the Superset Principle will ensure that it can spell out negative markers at various scope positions in the clause. In order to spell out *bëri-wul* 'few', spellout-driven movement applies: the complement of Neg (vP) moves to SpecNegP.

(34)



NegP can now be spelled out by (33), given that (33) contains NegP as a subtree.

The mirror image pattern of Wolof does not occur in my sample. This would be a pattern where the mass NQ would be analytic, and the count one opaque, as schematically represented in (35):

(35)

*	count	mass
negative	FEW	NOT.MUCH

The tentative universal in (9b) above, which states that if a mass NQ-word is analytic, the count NQ-word is also analytic, rules out the pattern. Its nonexistence can be derived from the analysis presented so far. Whenever a language has a lexical item for FEW, this lexical item will also be inserted when syntax merges a structure that is contained in the structure for FEW, in virtue of the Superset Principle. This is the case for the mass NQ-word, consisting of NegP and QP. The analytic option for the mass NQ will hence not be derived, because movement only takes place if simple phrasal spellout is not possible. Conversely, if a language does not have a lexical item for NQ-words (like Wolof), it will take recourse to a negative marker. Based on my sample, it seems that this marker is always syncretic with the marker for sentential negation (universal (9a)). A further observation in this respect is the fact that all languages in the sample with analytic NQ-words have a negative marker which is syncretic for all different scope positions for negation (apart from Japanese, which also has a more complex NQ-word construction).

5 Conclusion

This paper presented data from a diversified language sample. I argued that there is typological evidence to decompose Q-words into at least four features arranged hierarchically in a functional sequence: <Num, Div, Neg, Q>. By means of these features and the nanosyntactic framework, syncretisms between count and mass Q-words and between opaque and analytic NQ-words can accounted for. Differences between languages are the result of the size and organisation of lexically stored trees. Languages with syncretisms have less lexical entries for NQ-words than languages without. If a language does not have a specific lexical item dedicated for the expression of NQ-words, then the meaning of the NQ-word is expressed by means of the positive Q-word and the sentential negative marker. Moreover, the fseq presented for Q-words seems apt to capture the implicative universals that emerge on the basis of the sample discussed in this paper.

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