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Notes on the Multiple Ambiguity of Bulgarian *mnogo*

1. *Introduction*

Bulgarian *mnogo* is usually considered to be an adverb appearing VP-internally as in (1), or PP-internally, as in (2). In all of these contexts, its meaning is ambiguous between that of Italian *molto* and *troppo* – as well as to English (*very*) *much* and *too much*. See (1) *vs* (3):

(1)   Toj pie **mnogo**
        he   drinks a lot

        'He drinks a lot'[1] or
        'He drinks too much'

(2)   Toj e **mnogo** nad   tova nivo
        he   is   much   above   this level

        'His level is much higher' or
        'His level is too high'

(3) a. Lui beve **molto**
        'He drinks a lot'

    b. Lui beve **troppo**
        'He drinks too much'

(4) a. Lui è **molto** sotto stress
        'He is very much under stress'

    b. Lui è **troppo** sotto stress
        'He is too much under stress'

Words like *many, much, few, little* have received much attention and have raised much controversy in the literature, especially in the semantic camp. As Rett (2018) points out, such words are so indeterminate that they can show up under different guises – adjectives, modifiers, adverbs or quantifiers. Following her, we will use the theory-neutral term 'q(uantity)-words'. Cross-linguistically, based mainly on restrictions internal to Eng-

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[1]   English *much*, as opposed to its Bulgarian and Italian equivalents, *mnogo, tanto*, is a polarity item. Cfr. **He drinks much vs He doesn't drink much* (Kayne 2005a: 27 and note 48).

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lish and other languages (cfr. *He drinks *much / *many / a lot*, where only *a lot* though not *much / many* can appear adverbially), the canonical usage of q-words is that of a prenominal modifier (q-adjective) semantically different from e.g., *a lot* (*many cows / much milk vs a lot of cows*). Bulgarian also has prenominal *mnogo* used indistinguishably for mass and count NPs (*mnogo kravi / mnogo mljako* 'many cows / much milk') and distributing over all sorts of quantitative contexts (within NPs, VPs and PPs) some of which will be seen below.

A specific Bulgarian-only property of *mnogo* is the absence of any singular *vs* plural distinction in its morphology. Unlike other Slavic languages (e.g. Russian *mnogie vs mnogo*, Serbian *mnogo vs mnogi*) or Romance (cfr. *tanto vs tanti*), the Bulgarian q-word is invariable (non-inflectional) in all contexts in which it appears (i.e., in combination with an NP, an AP, a VP, a PP). Assuming that these usages reflect a different distribution, it can be said that Bulgarian *mnogo* has neutralized the adjectival-adverbial distinction in favor of the latter and this is how it is characterized in contemporary grammars, namely as an adverb of quantity / amount or degree (Stojanov 1983)[2].

Related to the loss of this distinction is the fact that Bulgarian *mnogo* can express only cardinal readings, differently from both Russian and Serbo-Croatian (S/C), which distinguish cardinal *vs* proportional readings through an inflectional *vs* a non-inflectional q-word. Thus, both occurrences of *mnogo* in (5a) are interpreted as indicating that the number of errors that the students made is large (i.e., is a maximal set whose size is presupposed to be large). For expressing the proportional reading, i.e., that the number of students who made mistakes is large relative to the entire number of students, which according to (Partee 1989) is a sort of partitive, *mnogo* must select a prepositional phrase *ot* NP 'many of the students'. Russian and S/C make the distinction through the use of an adjectival *vs* adverbial *mnogo* (Krasikova 2011 on Russian, Čulinović 2016 on S/C). See (5b, c):

(5) a. BG Mnogo   studenti   sa napravili   mnogo   greški
             Many-INV   students-M.PL   are made   many-INV   mistakes

             'Many students have made many mistakes'

     b. RUS Mnogie   studenty   sdelali   mnogo   ošibok
             many-M.PL   students-M-PL   made   many-INV   mistakes-GEN.PL

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a.   отъпоуштаіѫтъ са ѥи грѣси мьнози. ѣко вьзлюби мъного (Lk 7:47, *Codex Marianus*; *Codex Assemanianus*: мнѡзий грѣси): 'her many sins have been forgiven – as her great love has shown'.

b.   се мънози грѣшъници и мъітаре, пришедъше възлежаахѫ съ исмъ · ι съ оученикы ѥго · (Mt 9:10, *Codex Marianus*: 'many tax collectors and sinners came and sat down with Jesus and his disciples'.

c.   да отъкрыѥтъ са отъ много съдьць помышлѥнье (Lk 2:35, *Codex Zographensis*); да отъкрыѩтъ са отъ мъногъ срдцъ помышлениѥ · (Lk 2:35, *Codex Marianus*): 'so that the thoughts of many hearts will be revealed'.

c. s/c Mnogi   studenti   su napravili mnoge   pogreške³ (T. Socanac, p.c.)
        many-M.PL students-NOM are made   many-ACC.PL mistakes-ACC
        'Many students have made many mistakes' (cardinal)
        'Many of the students have made many mistakes'(proportional)

As a multiply ambiguous element Bulgarian *mnogo* is also used in differential comparatives where it functions as a degree modifier (intensifier). This is illustrated in (6): in (6a) it has scope over *poveče* 'more', and in (6b) it scopes over the comparative degree of so-called gradable adjectives like *happy, tall* and their derived adverbial forms *high*, *fast*, etc. Slavic equivalents of *mnogo* in its degree modifier function have a differentiated morphological make-up. Czech for example uses *mnohem* in this function, which is a derived inflectional form of *mnoho* 'many/much', while Russian adds a prefix (*namnogo*) and is thus derivationally more complex than *mnogo*. English is similar to Bulgarian in not distinguishing adverbial and adjectival q-words though it exploits the distinction between *many* and *much* typically reserved for mass-count quantification. And Italian has more than one q-word (*molto, tanto, troppo*), which will be compared to Bulgarian below:

(6) a.   Mnogo poveče   studenti   dojdocha dnes (v sravnenie s včera)
          many more   students   came today   (with respect to yesterday)
    a′.   Molti/tanti   più   studenti   sono arrivati oggi (Italian)
          many   more   students   have come today
    b.   mnogo po-visok   /   mnogo po-visoko
          much more-tall-ADJ   /   much more-high-ADV
    b′.   molto/tanto più alto;   molto/tanto più in alto (Italian)
          'much taller'   'much higher'

Bulgarian also differs from another South Slavic language, Slovenian, which possesses more than one q-word *precej* 'many, much, quite' and *veliko* 'many, much, a lot' but with a different distribution: while both *veliko* and *precej* can combine with comparatives, only the former combines with adjectives, adverbs and PPs (Stateva, Stepanov 2016). In all of these contexts Bulgarian uses *mnogo* (cfr. [1]-[2] above):

(7)   veliko srečnejši =   precej bolj srečni
          very happier   =   too more happy
          'much happier'
(8) a.   Članek je precej/*veliko   zanimiv (Stateva, Stepanov 2016, ex. 4)
          article is quite/a lot   interesting
          'The article is quite interesting'
          cfr. Bulgarian: *Statijata e mnogo interesna*

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³   It is not clear whether in order to get a partitive reading S/C must use the adjectival *mnogi/e*. Tomislav Socanac informs me that the partitive reading is also available with non-inflectional *mnogo*. The issue is obviously more complicated and requires a semantic analysis in terms of scope interaction. Thanks to Tomislav for discussion.

b.   Do doma   je   precej / *veliko   daleč
       to house   is   quite / a lot   far

'It is quite far to the house'
cfr. Bulgarian: *Do vkăšti e mnogo daleče*

c.   Danes   je   temperatura   precej / *veliko   nad 7°C
       today   is   temperature   much / a lot   above 7°C

'Today's temperature is much above 7°C'
cfr. Bulgarian: *Dnes temperaturata e mnogo nad 7°C*

2.   *Adjectival and Quantifier Properties of Bulgarian* mnogo

As illustrated above, q-words are controversial elements in many languages since they do not easily lend themselves to a universal characterization. Such words show different properties in the various constructions in which they may appear: a) as existential quantifiers in combination with NPs (*Many people say that*), b) as part of *wh*-phrases in quantity questions (obligatory in English, e.g. *how* *[*many*] but optional in Bulgarian *kolko* [*mnogo*]); c) as modifiers of comparatives (*John is much taller than Bill, Ivan e mnogo po-visok ot Petăr*), d) as adverbial modifiers in degree quantifier expressions (obligatory in English, cfr. [*too] *much pizza*, optional in Bulgarian [*tvărde*] *mnogo pizza*).

As Rett (2008, 2018) points out, there are 4 different types of proposals based on each of these instantiations but they can be reduced to basically two: a) q-words are quantifiers; b) q-words are q(uantity)-adjectives. Rett (2008) rejects both of these proposals and presents a more comprehensive theory of q-words as ranging over intervals (sets of degrees) rather than over individuals only. In this section, we will try to look more carefully at the syntax and semantics of the ambiguous *mnogo* of Bulgarian trying to establish its properties in comparison with Italian and English.

As argued by Barwise and Cooper (1981) and Keenan (1996), q-words in English (their m-words) are apparently similar to other quantifiers, such as *some* and *all*. For one thing, they occur pre-nominally and seem to occupy the same position (cfr. *Some / all / many people came*). They can be considered as members of the quantifier paradigm also from a semantic point of view, i.e., both reflect some quantificational properties of the set of individuals denoted by the following NP. According to quantifier-based accounts, *many* (in its cardinality interpretation) introduces a degree function d = 'a large amount / quantity of', which is context sensitive[4]. For example, the value of d in *Many circles are green* if uttered in a context of 20 circles is much smaller than the value of the same q-word in Many TV viewers are bored where the potential number of TV viewers is left unspecified but is presumed to be very high. Alternatively, it has been argued that *many* incorporates

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[4]   In a context like *Many people prefer peace to war* the meaning of *many* equals that of *great many,* while in a context like *Many presents were nice* the meaning of *many* equals that of *many / the majority of the presents*, i.e., the amount could be relatively small.

a cardinality operator which binds a free variable d with the function of indicating the relevant set. Thus, in a sentence like *Many students arrived*, the cardinality of the intersection between the set denoted by the NP students and the set of individuals that arrived is greater than d, whose value is determined by context (Rett 2018: 7).

However, *many, few* do not pattern like the other quantifiers in all relevant respects. First of all, they differ in combinatorial properties: they can be preceded by a definite article or a demonstrative pronoun unlike *some* or *all* (cfr. *The many guests brought presents, That many guests have not come before*). Second, q-words can combine with some *wh*-elements, like *how*, e.g. *How many guests came*?, which is never the case with true quantifiers. Third, q-words like *many, few,* though not *some, all*, can occur in predicatively, cfr. *John's worries are many* / **some* / **all*. Based on these distributional differences, various proposals have been advanced in the literature, according to which q-words are not so much quantifiers but rather one type of adjectives (see in particular Kayne 2005a: § 3.5).

Turning to Bulgarian, the q-words share some properties with quantifiers, yet they also differ from them in others. First, while it is true that *mnogo* and *malko* occupy the same attributive position as the canonical quantifiers *vsicki* 'all' and *njakoj* 'some', they can also combine with a determiner, unlike true quantifiers, see (9a-b)[5]. Additionally, *mnogo* and *malko* can also appear predicatively (10)[6].

(9)   a.   Mnogo / malko / vsički / njakoi studenti   dojdocha
                'Many / few / all / some students came'

      b.   Mnogoto / malkoto / vsicki(??te) / njakoi(*te) gosti   donesocha   podaraci
                many-DET / few-DET / all-DET / some-DET   guests   brought   presents
                'The many / few / *all / *some guests brought presents'

(10)   Problemite   sa   mnogo/malko/*vsički/*njakoi
              'The problems are many / few / *all / *some'

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     [5]   Note that while the quantifier *vsicki* 'all' can in principle combine with a determiner, the prenominal position in (10) disfavors such a determiner usage. Such uses, which instantiate neither the cardinal nor the proportional reading of the quantifier, but a purely existential reading, argue against treating *mnogo* as a determiner either.

     [6]   Čulinović (2017) shows that S/C non-inflectional *mnogo* 'many' too can appear predicatively (with a genitive NP), see (I), contrary to true quantifiers as well as to *mnogi*. This makes implausible Krasikova's (2011) characterization of their different distribution in terms of quantifier *vs* adjective, given that quantifiers are generally banned from the predicative position. Thus, it seems there is no clear correlation between inflectional properties and categorical status of *many / much* in Slavic as either quantifiers taking a genitive NP or adjectives agreeing with the NP.

(I)   a. S/C   *Te djevojke su mnoge   /   RUS   *Ėti devuški mnogie   (Čulinović 2017, ex. 46)
                  these girls are many-F.PL   these girls many-F.PL

      b.   Tih devojaka je mnogo   (Čulinović 2017, ex. 57)
                  'These girls are many'

To further complicate things, Bulgarian *mnogo* can optionally appear in *how many* questions, as well as in comparatives, where it exhibits adjectival properties but with a difference in interpretation. Thus, while (11) without *mnogo* is a regular equative construction, the presence of *mnogo* turns it into an excessive construction by contributing an evaluative meaning (i.e., considerable number of worries, considerable height):

(11) a.   Ivan ima tolkova   (mnogo) pritesnenija, kolkoto i   Marija.
           Ivan has as / so   (many)   worries   as   and   Mary
           'John has as many worries as Mary / John has so many worries like Mary'

     b.   Ivan e tolkova   (mnogo) visok,   kolkoto   i   Marija.
           Ivan is as / so   (much)   high   as   and   Mary
           'John is as tall as Mary' / 'John is so tall as Mary is'

The fact that *mnogo* can combine with degree quantifiers like *tolkova* 'as / so' argues against a pure quantifier treatment of Bulgarian *mnogo* since true quantifiers never combine with degree quantifiers. But although it appears to pattern with adjectives in several relevant respects, i.e., positionally, as well as semantically, its distributional potential exceeds that of adjectives.

3.   *Q-Words and Their Degree Modifiers*

Although Bresnan (1981) too considers quantity adjectives (our q-words) quantifiers, the important result of her analysis is to connect them with degree quantifiers like *very, so, as,* etc. by arguing, on the basis of (12), that quantity adjectives form part of the degree modifier and can thus modify either an NP or an AP, where the quantity adjective occupies an intermediate position. However, given that the quantity adjective cannot directly modify an AP – see the second column of (12)[7] –, Bresnan suggests that it gets deleted in surface structure.

(12)   very much wine / very many people   very (*much) intelligent
        so much wine / so many people   so (*much) intelligent
        how much wine / how many people   how (*much) intelligent
        too much wine / too many people   too (*much) intelligent
        that much wine / that many people   that (*much) intelligent
        more (-er + many) wine / more people   more (-er + much) intelligent

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[7]   New Zealand English speakers appear to (marginally) accept *much* in front of adjectives which can enter a reduced relative clause (due to their predicative nature), though not in front of direct modification adjectives, which cannot (due to their non predicative nature): *a very* [?*much*] *influential philosophy vs a very* [*much] *heavy drinker*)(see Cinque 2010: § 5.4).

Since almost exactly the same pattern is observed in Bulgarian, apart from the first line of the paradigm (cfr. [13]), we could adopt the same solution, namely that *mnogo* gets deleted when it's found in a position before an AP[8].

(13)   mnogo vino / chora   mnogo krasiv
           kolko (mnogo) vino / chora   kolko (*mnogo) krasiv
           tvărde mnogo vino / chora   tvărde (*mnogo) krasiv
           tolkova mnogo vino / chora   tolkova (*mnogo) krasiv
           poveče (*mnogo) vino / chora   po- (*mnogo) krasiv

The fact that Bulgarian *mnogo* can correspond to a quantifier, an adjective, or neither (in its adverbial usage inside a VP or a PP), makes the task of providing a unified analysis for these ambiguities even more challenging. Below we offer some observations although much further work is necessary in order to arrive at a fully comprehensive analysis of Bulgarian q-words.

That Bulgarian *mnogo* may also render Italian *troppo* (as well as English *too much*) is particularly evident in construction like (14), where only the 'too much' reading is available:

(14) a.   Sinăt mu e **mnogo** glupav, za da razbere tova
        'His son is too / *very stupid to understand that'

      b.   Suo figlio è **troppo** / ***molto** stupido per capire questo
         'His son is too / *very stupid to understand that'

The existence of one word in one language which corresponds to two (or more) words in another is a situation often encountered whenever the lexical entries of two languages are compared. While in the case at hand Italian has two lexical items, *molto* and *troppo*, which correspond to the single lexical item *mnogo* of Bulgarian, the inverse situation obtains in other cases. For example, Bulgarian has two adverbs, *skoro* 'soon' and *rano* 'early', which correspond to the single lexical item *presto* of Italian[9].

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     [8]   The case of the marked member of the pair, *malko*, is more complex. With certain adjectives the paradigm can contain *malko*. See below.

     [9]   The ambiguity of *presto* is not simply a lexical ambiguity. Depending on its meaning, 'soon' and 'early', *presto* occupies two distinct syntactic positions. When it means 'early' it necessarily occupies a position after the finite verb (a position low in the hierarchy of adverbs – cfr. Cinque 1999: § 4.2.5), like Bulgarian *rano*. See (I) and (II), respectively:

(I)   a   Ogni giorno, lui si sveglia presto
          'Every day, he wakes up early'

       b.   *Ogni giorno, lui presto si sveglia
          'Every day, he early wakes up'

(II)   a.   Vseki den toj se budi rano
          'Every day, he wakes up early'

Given however that ambiguities are not only lexical but also constructional, the question arises what is the exact contribution of the q-word to the semantics of the respective expression.

4.   *The Role of Silent Elements in a Degree Analysis of Q-Words*

In taking an 'underspecification' parametric approach to cross-linguistic differences in the lexicons of languages (as we tentatively did for the Italian / Bulgarian difference discussed in fn.9) care should be taken to distinguish such cases from cases where the difference is rather to be attributed the presence of silent (unpronounced) elements in one of the two languages (cfr. Richard Kayne's recent work)[10]. We would like to argue that this is precisely the case of the difference between *mnogo* and *molto / troppo*. To be able to see this we will have to establish the exact lexical correspondences of such elements between the two languages (the usual challenge of any comparative investigation).

To appreciate the role of silent elements in establishing such correspondences it will be useful to begin by comparing Italian with English. Compare the English paradigm in (12) above repeated here as (15)-(16) and the corresponding Italian paradigm in (17)-(18)[11]:

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b.   *Vseki den toj rano se budi
            'Every day, he early wakes up'.

When it means 'soon' it occupies a position preceding the finite verb, just like Bulgarian *skoro*. See (III) and (IV):

(III)   Lui presto si sveglierà. / *Lui si sveglierà presto.
            'He will soon wake up'

(IV)   Toj skoro šte se budi / *Toj šte se budi skoro
            'He soon will wake up / *He will wake up soon'.

The two positions that *presto* can occupy can be filled simultaneously ([V]a.), as can *skoro* and *rano* ([V]b.):

(V) a.   Lui *presto* dovrà alzarsi (molto) *presto*
     b.   Toj *skoro* šte se budi (mnogo) *rano*
            'He will soon have to wake up (very) early'

It is tempting to think that *presto* is lexically underspecified with respect to the more specialized meanings of Bulgarian *rano* and *skoro*, which share some meaning component and are associated to two distinct positions in the clause (in the two, arguably all, languages).

[10]   Kayne 2005a, 2005b, 2007.

[11]   Like English and Bulgarian the paradigm with adjectives cannot contain *tanto / i* (see [I]), though it can contain the marked member of the pair, *poco / pochi* (see [II]):

(I) a.   Lui è molto (*tanto) disponibile
            'He is very (much) available'

     b.   Lui è così (ʾtanto) disponibile
            'He is so (much) available'

(15) a. very much wine / many people
     b. so much wine / many people
     c. how much wine / many people
     d. too much wine / many people
     e. -er much wine / many people (→ more)
     f. -est much wine / many people (→ most)

(16) a. very little wine / few people
     b. so little wine / few people
     c. how little wine / few people
     d. too little wine / few people
     e. -er little wine / few people (→ less/fewer)
     f. -est little wine / few people (→ least/fewest)

(17) a. molto / i (*tanto / tanti) vino / ospiti
     b. così tanto / tanti vino / ospiti
     c. quanto / i (*tanto / tanti) vino / ospiti
     d. troppo / i (*tanto / tanti)
     e. più (*tanto / tanti)[12]

(18) a. molto poco / molti pochi vino / ospiti
     b. così poco / pochi vino / ospiti
     c. quanto poco / quanti pochi vino / ospiti
     d. troppo poco / troppi pochi vino / ospiti
     e. più poco / pochi vino / ospiti (better: *meno*)

In English the singular/plural pair q-words *much / many* and *little / few* can be modified by the degree quantifiers (intensifiers) *very / so / how / too /* etc. While the same holds of the Italian singular / plural pair *poco / pochi* this is not true for the pair *tanto / tanti*. Here we find that *tanto / tanti* can only be modified by *così* 'so'. This confirms that *tanto / tanti* is the positive pair of *poco / pochi*, corresponding to English *much / many* even though it can only be modified by *così*[13]. The comparison of (17) with (18) and with the English paradigm (15) and (16) shows that *tanto / tanti* (as opposed to its negative counterpart *poco / pochi*) cannot be overtly modified by *molto* 'very', even though *tanto / tanti* can mean 'very much / very many' (see [19]). This suggests first that *molt-o / i* can never function as a q-word (a quantity adjective), only as a degree quantifier (intensifier) while *tanto / i* can take up both of these functions.

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      c. Quanto (*tanto) disponibile è?
          'How (much) available is he?'

      d. Lui è (fin) troppo (*tanto) disponibile
          'He is (even) too (much) available'

      e. Lui è più (*tanto) disponibile
          'He is more (much) available'

(11) a. Lui è molto poco disponibile
          'He is very little available'

      b. Lui è così poco disponibile
          'He is so little available'

      c. Quanto poco disponibile è?
          'How little available is he?'

      d. Lui è troppo poco disponibile
          'He is too little available'

      e. Lui è *più poco (→ meno) disponibile
          'He is more little (→ less) available'.

[12]   Italian children use *più tanto / tanti* at one stage of their acquisition of the adult grammar.
[13]   Also see Kayne (2005a: 28f) on the equivalence of *much / many* with French *tant*.

(19) a.   [$_{\text{Degree quantifierP}}$ molto / molti [$_{\text{Q-wordP}}$ TANTO / TANTI]]

   b.   [$_{\text{Degree quantifierP}}$ così [$_{\text{Q-wordP}}$ tanto / tanti]]

Given that surface structure does not admit two occurrences of *many*, even though they are lexicalized by different words in Italian, we suggest that in the structural representation (19a), there is an open slot for the q-word *tanto / tanti*, which however is not pronounced. In other words, we propose a silent TANTO / I for the structure in (19a), indicated in capitals following Kayne's (2005) convention of representing silent categories. The second alternative for the categorical status of *tanti/tanti* is its intensifier function (20), for which see evidence below.

(20)   [$_{\text{IntesifierP}}$ tanto / tanti [$_{\text{q-wordP}}$ TANTO / I [$_{\text{NP}}$ vino / ospiti]]]
            '(very) much wine / so many guests'

More alternatives are available for the lexically underspecified *tanto / i*. If instead of *così* in (19b) the degree quantifier function is taken by *quanto / i, troppo / i* or *più*, only the degree quantifier gets pronounced while the q-word *tanto / tanti* remains silent[14]. If this is correct, the paradigm in (17c, d, e) can be given as in (21), following once again Kayne's convention of representing silent elements in capitals:

(21) a.   quanto / i TANTO / TANTI vino / ospiti
            'how much wine / how many guests'

   b.   troppo / i TANTO / TANTI vino / ospiti
            'too much wine / too many guests'

   c.   più TANTO / TANTI vino / ospiti
            'more wine / guests'

(22) illustrates our suggestions that degree quantifiers are in the Spec of the q-word, which is a modifier of a NP or an AP[15].

(22) a.   [[[$_{\text{Degree quantifierP}}$ più [$_{\text{Q-wordP}}$ TANTO / I]] [$_{\text{NP}}$ vino / libri]]]

   b.   [[[$_{\text{Degree quantifierP}}$ più [$_{\text{Q-wordP}}$ TANTO]] [$_{\text{AP}}$ bello]]]

The view that *tanto / i* is lexically underspecified and hence comes to occupy more than one position in various quantity constructions can also explain why this q-word can also act as an intensifier of another degree quantifier such as *più* 'more'. If, following Bresnan (1973) *more* is assumed to be a degree quantifier, and to correspond to *many/*

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[14]   Child language however differs from the adult language in pronouncing *tanto / i* after *più*.

[15]   We would like to remain neutral as to the exact categorial status of the q-word: an adjective, heading an AP projection, or a quantifier, heading a QP projection. This is the reason we label the projection Q-wordP.

much + the comparative morpheme *-er* (see [16e]), which the semantic literature regards as containing a variable *d* ranging over differential degrees (see in particular Rett 2018), we can assume that although *più* is suppletive, its function in e.g. *Gianni è più alto di Piero* 'John is taller than Peter' is a differential comparative parallel to that of English *-er*. And just as in English, its variable *d*, measuring the difference in height in the example just cited, can be additionally intensified by a q-word signaling that the gap between Gianni's height and Piero's height exceeds a certain conventional standard. Cfr. *Gianni è tanto / molto più alto di Piero* 'John is much higher than Peter'. In this case, *più* as a degree quantifier is itself intensified by the q-word *tanto*, used as an intensifier, and can reasonably be supposed to be occupying the Specifier position of *più* (see [23]). In this function, *tanto* appears to be completely parallel to the degree quantifier *molto*. See (24).

(23)   Lui ora ha **tanto** più TANTO vino / **tanti** più TANTI amici
         'He now has much more (= -er + much) wine / many more (= -er + many) friends'

(24)   Lui ora ha **molto** più TANTO vino / **molti** più TANTI amici
         'He now has much more (= -er + much) wine / many more (= -er + many) friends'

       Consider now the Bulgarian singular and plural paradigms. The first important thing to mention is that *mnogo* is ambiguous between It. *molto*, *troppo* and *tanto*. See (25) and (26). Hence, it is ambiguous between a q-word and an intensifier. *Tolkova / kolko* 'so / how' are obligatory since they specify the degree of an otherwise vague quantity. In differential comparatives and superlatives this function is taken over by the intensifiers *po-* 'more'[16] and *naj-* 'most':

(25) a.   mnogo vino 'very much wine' / 'too much wine' – cfr. It. molto vino / troppo vino
     b.   *(**tolkova**) mnogo vino 'so much wine' – It. tanto vino
     c.   *(**kolko**) mnogo vino 'how much wine' (or simply *kolko vino*)[17] – It. quanto TANTO vino
     d.   *(**po-**)mnogo vino 'more wine' (cfr. *Ivan izpi poveče vino i ot Marija* 'John drank even more wine than Mary') – cfr. It. più TANTO vino
     e.   *(**naj-**)mnogo vino 'most wine'

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       [16]   Although *po-* is the abbreviated form of the comparative suppletive form *poveče* 'more', its function is excessive rather than comparative. This is indicated by the fact that the presence of *mnogo* is required when combining directly with NP (cfr. [26d] as opposed to *poveče vino* 'more wine'). This might indicate that *poveče* is a combination of *po + mnogo* where *mnogo* is a q-word like its English counterpart *more = many / much + -er*, while *po-mnogo* 'more many / much' in (25d) is an intensifier of the same q-word.

       [17]   There is an interesting difference between *kolko knigi ima?* 'how many books does he have?' and *kolko mnogo knigi ima?* 'how many books does he have?'. The former is neutral with respect to the number of books that he has (the answer could be: two), while the latter presupposes that he has many and asks "precisely how many". The answer "two" would be odd. For more discussion and a semantic proposal see Pancheva (2018).

(26) a.   mnogo knigi 'very many books' / 'too many books'
    b.   *(**tolkova**) mnogo knigi 'so many books'
    c.   *(**kolko**) mnogo knigi 'how many books' (or simply *kolko knigi*)
    d.   *(**po-**)mnogo knigi 'more books'
    e.   *(**naj-**)mnogo knigi 'most books'

The proposed structure is given in (27):

(27)   [$_{\text{degree quantifierP}}$ tolkova / kolko / po- / naj- [$_{\text{q-wordP}}$ mnogo [MEAS NP]][20]
       Cfr. Italian [$_{\text{degree quantifierP}}$ così / quanto / molto / troppo / più [$_{\text{q-wordP}}$ tanto[19] / TANTO [MEAS NP]][20]

Note now that as seen in (25a) and (26a) *mnogo* is ambiguous between 'very (much / many)' and 'too (much / many)'. In this case, thinking of Kayne (2005b: §3.5, 2007), there is reason to believe that the ambiguity of *mnogo* is only apparent and is in fact due to the presence of one or the other of two different silent degree quantifiers (*strašno* 'very' and *tvărde* 'too'), as these are the only degree quantifiers which are optional in the paradigms (see [28a-b], and the only two which are in complementary distribution with *mnogo* in the paradigm of [28] involving adjectives – see [28e, e´, f, f´]).

(28) a.   **kolko** (*mnogo) glupav 'how stupid'
    b.   **tolkova** (*mnogo) glupav 'so stupid'
    c.   **po-**(*mnogo) glupav 'more stupid'
    d.   **naj-**(*mnogo) glupav 'most stupid'
    e.   **strašno** (*mnogo) glupav 'very stupid'[21]   or   (28e´)   mnogo glupav[22]
    f.   **tvărde** (*mnogo) glupav 'too stupid'[23]   or   (28f´)   mnogo glupav[24]

Assuming the structure in (27), we propose that while all members of the paradigm (28) contain a silent *mnogo*, the alternatives of (28e-f) can be disambiguated by positing a silent degree quantifier (29b):

(29) a.   [$_{\text{Degree quantifierP}}$ kolko/tolkova/po-/naj-/strašno/tvârde [$_{\text{Q-wordP}}$ MNOGO [$_{\text{AP}}$ glupav]]]
       'very/too stupid'.

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[18]   MEAS is a measure function that allows nouns to be associated with a degree by mapping individuals to some degree on a certain scale (e.g. of comparison). The presence of this function is assumed by most current semantic theoreticians (Solt 2015, Schwarzschild 2002).

[19]   Pronounced only after *così*.

[20]   Unlike Italian *tanto*, Bulgarian *mnogo* cannot be silent when occurring with NPs.

[21]   I.e., strašno MNOGO glupav 'very stupid'.

[22]   I.e., STRAŠNO mnogo glupav 'very stupid'.

[23]   I.e., tvărde MNOGO glupav 'too stupid'.

[24]   I.e., TVĂRDE mnogo glupav 'too stupid'.

b. [$_{\text{Degree quantifierP}}$ STRAŠNO / TVĂRDE [$_{\text{Q-wordP}}$ mnogo [$_{\text{AP}}$ glupav]]]
   'very / too stupid'.

Mnogo is not mutually exclusive with one degree quantifier – *po-*'more', as seen in (30a). (30b-c) show that it can also modify the degree quantifier *poveče.* In that case, it serves as an intensifier of the full degree quantifier *poveče* 'more' not only in differential comparatives but also in excessive constructions where *mnogo* can be additionally intensified by *strašno* 'very'. This means that if *poveče* is *po + mnogo* (see fn. 16), then *mnogo* too can occur as a degree quantifier but only if it modifies another degree quantifier. This usage is of an intensifier specifying that in e.g., (30c) the quantity of books that John possesses exceeds the quantity of books possessed by Mary by a (extremely) great degree. In other words, the intensifier measures the size of the difference between the number of books that John has and Mary has.

(30) a. Ivan e mnogo po-štastliv sega
   Ivan is much more-happy now

   'Ivan is much happier now'

b. V gradinata   sega   ima   strašno / tvărde mnogo cvetja.
   in garden-DET   now   there is   very / too many flowers

   'There are very / too many flowers in the garden now'

c. Ivan ima (strašno / tvărde)   mnogo poveče   knigi ot Marija
   John has very / too   many more   books than Mary

   'John has a lot more books than Mary has'

According to Pancheva (2018), *mnogo* has access to two potential positions: that of a q-word/adjective and that of an intensifier (see [31a]) but only one of these positions can be pronounced. In our framework, which makes use of silent elements, Pancheva's generalization can be restated in terms of the structures in (29) above, as well as those in (31b-c), where *strašno* 'very' and *tvărde* 'too' are ambiguous between degree quantifiers and intensifiers giving rise to different combinations with an overt or silent q-word *mnogo*.

(31) a. [mnogo intensifier / degree quantifier [mnogo q-adjective [MEAS NP] (Pancheva 2018: 221, ex. 49b)
   b. [[$_{\text{Degree quantifierP}}$ strašno / tvărde [$_{\text{q-wordP}}$ mnogo [MEAS NP]]] Cfr. (30b)
   c. [[$_{\text{IntensifierP}}$ strašno / STRAŠNO [$_{\text{Degree quantifierP}}$ po + [$_{\text{q-wordP}}$ mnogo] MEAS NP]] Cfr. (30c)

Note that the marked member of the pair, *malko*, unlike the unmarked one, *mnogo* can be retained with adjectives. See (32):

(32) a. kolko malko   vnimatelen
   'how   little   attentive'

b.   tvărde malko   vnimatelen
       'too   little   attentive'

c.   tolkova malko   vnimatelen
       'so   little   attentive'

d.   po-malko   vnimatelen
       (Lit. more-little attentive)
       'less attentive'

e.   naj-malko   vnimatelen
       most-little   attentive
       'least attentive'

In *mnogo malko vnimatelen* 'very little attentive', *mnogo* is again used as an intensifier rather than as a q-word. That is, we have a situation similar to *mnogo po-krasiva ot nego* 'much more beautiful than him', where *mnogo* is used as an intensifier of a degree quantifier (quite parallel to the use of Italian *tanto* in (18b) and (19) above).

Thus the ambiguity of (1) and of (25a) and (26a) is, as noted, plausibly to be attributed to the presence of a silent degree quantifier; either *strašno* 'very' or *tvărde* 'too' (which cannot be overtly realized within an AP, if *mnogo* is). Unlike the case of Italian *presto* discussed in fn.9, here *mnogo* is not lexically underspecified. Rather it acquires its apparent ambiguity as a consequence of the independent property of *strašno* 'very' and *tvărde* 'too' to be unpronounced.

5.   *Conclusions*

Returning now to the question posed at the beginning (whether and how the cases that we have examined so far can be reduced to one of the parametric option of underspecification of features in the (substantive and functional) lexicon or to the one involving the presence of silent elements, it appears that the contrast between Italian *molto / troppo vs* Bulgarian *mnogo* is indeed amenable to the pronunciation *vs* non-pronunciation option. We also showed that the q-word *mnogo*, corresponding to the English q-word *much / many* and to the Italian q-word *tanto / tanti* can also have intensifier usages, in which case it occurs as a specifier of such degree modifiers as 'how', 'so', 'too', etc.

We agree with Rett (2008), and much work on degree semantics, that a unified treatment of q-words can only be built if they are considered degree elements which can range over different gradable predicates (adjectives like e.g. *tall, happy* in their positive, comparative or superlative degree). As a most clear example of this canonical use of degree is e.g. *Ivan e mnogo po-visok ot Petăr* 'John is much taller than Peter' where *mnogo* measures the size *d* of the gap between John's height and Peter's height and evaluates it as big with respect to a certain contextually salient standard (Rett 2018: 11). In their intensifier usage q-words too denote relations between measures or between things that can be measured. This is the reason why they can modify not only different individuals (in combination with NPs) but also other 'entities' like eventualities (as VP adverbs), spatial and temporal relations (as PP adverbs).

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Abstract

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Notes on the Multiple Ambiguity of Bulgarian mnogo

This paper discusses the ambiguity of the Bulgarian quantity word *mnogo* and argues that it is not an intensifier *stricto sensu*, although it can also have such a usage. Comparing *mnogo* with its Italian counterparts *troppo*, *tanto*, and *molto*, we show that it corresponds more precisely to Italian *tanto* (English *much*), which can be modified by overt intensifiers like *così* (*così tanto*) or silent ones like *molto* / *troppo* (*tanto*), etc. (cf. English *so* / *very* / *too much*). However, *mnogo* can also function as an intensifier, much like Italian *molto* and English *much*: *toj njama mnogo pari*; *non ha molti soldi*; *he doesn't have much money*. As to its interpretation as *troppo*, we argue that *mnogo* is modified by the silent degree modifier *tvărde*, as in: *tvărde mnogo*.

Keywords

Quantity Word; Intensifier; Degree Modifier; Bulgarian; Italian; English; Slavic.