

MUCH-SUPPORT AND UNPRONOUNCED MUCH*

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1. Introduction

This paper focuses on the distribution of degree adjectival modifiers in Spanish. We distinguish two series of morphologically related degree expressions in Spanish: *-to* vs. *-toless* forms, i.e. *tanto* “so much” vs. *tan* “so”. In the framework of Corver’s (1997) Split-DegP Hypothesis, it will be shown that the distribution of these two series of degree expressions corresponds to that of Q-heads (*-to* forms) and Deg-heads (*-toless* forms). We argue that Q-heads, as opposed to Deg-heads, are nominals, more concretely adjectives, and that they license an unpronounced MUCH head (cf. Kayne 2002b). MUCH will be shown to play a crucial role in the account of the distribution of Q-heads and Deg-heads in Spanish. We also consider the relationship between MUCH in Spanish and overt *much* in English *much*-support contexts, as well as the somewhat different conditions determining the licensing of these two elements. Finally, we argue that the postulation of an unpronounced MUCH accounts for the particular syntactic properties of *very* in English.

2. Deg-heads and Q heads in Spanish

Corver (1997) proposes to incorporate into Abney’s (1987) DegP analysis for degree expressions a categorial distinction between elements like *more*, *less* and *enough* (Q-heads) and elements like *so*, *too* and *as* (Deg-heads), see also Bresnan (1973).¹ One main piece of evidence for this distinction comes from contexts in which the adjectival phrase does not follow the degree expression, but rather the latter is followed by an adjectival pro-form or by the trace of a displaced AP, as shown in the English *so*-pronominalization and Dutch Split-topicalization contexts in (1) and (2) respectively :

- (1) a. John is *good at mathematics*. He seems [**enough** *so* to enter our graduate program].
b. * The weather was *hot* in Cairo – [**so** *so*, that we stayed indoors all day].
Corver (1997: 126-127)

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¹ The syntactic status of degree expressions like *enough*, *much*, etc. as heads is controversial; see Doetjes (1997, 2001) and Doetjes, Neeleman & Van de Koot (1998) for an analysis of Q-heads as adjuncts.

- (2) a. *Bang voor honden_i* is Jan [**minder** t_i dan Karel].
 afraid of dogs is Jan less than Karel
 “Jan is less afraid of dogs than Charles.”
- b. * *Bang voor honden_i* is Jan [**te** t_i].
 afraid of dogs is Jan too
 “John is too afraid of dogs.” Corver (1997: 127)

Deg-heads, such as English *so* and Dutch *te* “too”, cannot modify an AP pro-form, cf. (1b), or the trace of a displaced AP, cf. (2b), whereas Q-heads such as English *enough* or Dutch *minder* “less” are perfect in the same contexts.

Romance languages also present a similar split between Deg-heads and Q-heads. In Spanish, certain degree expressions are disallowed in adjectival CL(itic) L(eft) D(islocated) C(ontexts), whereas others are fully acceptable, as shown in (3)-(4), where the clitic *lo* “it” doubles the topicalized adjective:²

- (3) a. Este libro es tan/muy interesante.
 this book is so/very interesting
 “This book is so/very interesting.”
- b. * Interesante, este libro lo es tan/muy [_{AP} t].
 interesting this book it-is so/very
 “This book is so/very interesting.”
- (4) a. Este libro es demasiado/bastante interesante.
 this book is too/enough interesting
 “This book is interesting enough/too interesting.”
- b. Interesante, este libro lo es demasiado/bastante [_{AP} t].
 interesting this book it-is too/enough
 “This book is interesting enough/too interesting.”

The Deg-heads *tan* “so” and *muy* “very” cannot occur when the adjective has been clitic left dislocated, as shown by the ungrammaticality of (3b). On the other hand, Q-heads such as *demasiado* “too” and *bastante* “enough” can modify a left dislocated adjective, cf. (4b). In addition, Spanish Q-heads share with their counterparts in English or French the property of occurring as modifiers of a variety of XP constituents, as shown in (5):

- (5) a. Juan es bastante alto. AP quantification
 Juan is enough tall
 “Juan is tall enough.”
- b. Juan no tiene bastante dinero. NP quantification
 Juan not has enough money
 “Juan doesn’t have enough money.”

² For discussion of a similar pattern in French see Doetjes (2001).

- c. Juan juega bastante al ajedrez. VP quantification
 Juan plays enough to-the chess
 “Juan plays chess quite often/?well.”
- d. Juan respondió bastante rápidamente. AdvP quant.
 Juan answered enough quickly
 “Juan answered quickly enough.”
- e. Juan tiene bastantes pocos libros. QP modification
 Juan has enough-PL few-PL books
 “Juan has few enough books.”
- f. Este libro es bastante más interesante. Comparative mod.
 this book is enough more interesting
 “This book is far more interesting.”

Deg-heads, on the other hand, are mostly restricted to AP, AdvP and QP modification, as shown in the paradigm in (6):³

- (6) a. Juan no es tan/muy alto. AP quantification
 Juan not is so/very tall
 “Juan is not too/very tall.”
- b. Juan no vino tan/muy rápidamente. AdvP quant.
 Juan not came so/very quickly
 “Juan didn’t come so/very quickly.”
- c. Juan no tiene tan/muy pocos libros. QP modification
 Juan not has so/very few books
 “Juan doesn’t have so/very few books.”
- d. * Juan no tiene tan/muy dinero. NP quantification
 Juan not has so/very money
- e. * Juan no juega tan/muy al ajedrez. VP quantification
 Juan not plays so/very to-the chess
- f. * Este libro no es tan/muy más interesante.
 Este book not is so/very more interesting
 Comparative mod.

3. Degree expressions surfacing as either Deg or Q elements

A subset of degree expressions in Spanish show two different forms, cf. (7)-(8):

- (7) a. tan “so” (8) a. tanto “so much/many”
 b. cuán “how”⁴ b. cuánto “how much/many”

³ See however section 5 for further discussion.

⁴ In many dialects, *cuán* “how” has become obsolete. In some of them, for instance certain varieties of Mexican Spanish, the analytical form *qué tan* “lit. what so” is used instead, as in (i):

- c. muy “very” c. mucho “very much/many”

The distribution of the forms in (7) and (8) follows that of Deg-heads and Q-heads respectively, as shown by the contrasts in (9) and (10):

- (9) a. Importante, este tema no lo es tanto/*tan [_{AP} t].
 important, this subject not it-is so much/so
 “This subject is not so important.”
 b. * Este tema no es (tanto) importante (tanto).
 this subject not is (so much) important (so much)
 “This subject is not so important.”
- (10) a. Importante, este tema no lo es mucho/*muy [_{AP} t].
 important, this subject not it-is much/very
 “This subject is not very important.”
 b. * Este tema no es (mucho) importante (mucho).
 This subject not is (much) important (much)

The (a) examples illustrate the contrast between *-to* and *-toless* forms: the latter cannot modify a displaced AP, cf. section 2, whereas the former can. The (b) examples show that the *-to* forms cannot be analyzed as adverbial in the contexts under consideration, since the *-to* forms cannot occur in the postverbal field when the adjective follows the copula.

4. *So*-pronominalization and *Much*-support

Corver (1997) accounts for many of the empirical differences between Deg-heads and Q-heads by claiming that they occupy different positions in the extended projection of APs. The tree in (11) shows the possible positions

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- (i) ¿Qué tan altos son tus hijos?
 what so tall are your children
 “How tall are your children?”

In most dialects, *cómo* “how” is used instead of the Deg-head *cuán* “how”, as in the example in (ii):

- (ii) ¿Cómo son de altos tus hijos?
 how are of tall your children
 “How tall are your children?”

However, *cómo* “how” in (ii) shows properties quite different from those of Deg-heads. Firstly, the preposition *de* “of” must obligatorily appear in front of the AP, and secondly the modified AP cannot be fronted together with the *wh*-element, as opposed to what is the case with *cuán* “how” and *qué tan* “what so”. The discussion of degree elements like *cómo* “how” or *igual* “as” in *igual de alto que ...* “as tall as...” falls beyond the scope of this paper, see Rivero (1980) and Corver (2001) for relevant discussion.

occupied by degree expressions (Deg-heads, Q-heads and adverbs) in the adjectival/adverbial domain:

- (11) $[_{\text{DegP}} [_{\text{Deg}} \{so, too, as, how\}] [_{\text{QP}} \{extremely, very, much^5\} \text{ } [_{\text{Q}} \{more, less, enough, much\}] [_{\text{A(dv)P}}]]]]$.

According to (11), Deg-heads are heads of DegP, a projection above QP, the projection occupied by Q-heads and adverbs. The ungrammaticality of the *so*-pronominalization cases, such as the one in (12), cf. (1b):

- (12) * The weather was *hot* in Cairo – [**so** *so*, that we stayed indoors all day].

is explained on the basis of the assumption that the Deg-head, *so* in (12), must θ -bind the degree argument of the adjectival pro-form *so* it quantifies on. According to Corver (1997), θ -binding must be local, and therefore the adjectival head must raise up to Q_0 in a structure like (11), otherwise Q_0 would qualify as closest governor with respect to A_0 . Under the assumption that the pro-form *so* is not an X_0 category, it is barred from raising to Q_0 in accordance with Chomsky's (1995: 223) Uniformity Condition on Chains, as shown in (13):

- (13) * $[_{\text{DegP}} [_{\text{Deg}} so_i] [_{\text{QP}} [_{\text{Q}} [_{\text{A}} so_{<di> j}] \text{ } [_{\text{Qe}}] \text{ } [_{\text{AP}} t_j]]]]]]$.
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Consequently, the degree argument of the adjectival pro-form is not θ -bound by the Deg-head and (12) is ungrammatical. The locality requirement on θ -binding of the adjectival degree argument can be met by the introduction of a dummy element, i.e. *much*, in the derivation, cf. (14a), an operation that Corver (1997) labels *much*-insertion:

- (14) a. The weather was *hot* in Cairo – [**so much** *so* that we stayed indoors all day].
 b. $[_{\text{DegP}} [_{\text{Deg}} so_i] [_{\text{QP}} [_{\text{Q}} \text{much}_{<di>}] [_{\text{AP}} so_{<di>}]]]]$.

Much is introduced under Q_0 and copies the degree argument of *so*, allowing at the same time for a proper θ -binding configuration, cf. (14b). *Much*-insertion is thought of as a last resort operation, and as such, it does not apply in contexts like the one in (15a), in which the adjective can raise to Q_0 :

- (15) a. *so* (* *much*) intelligent
 b. * $[_{\text{DegP}} [_{\text{Deg}} so_i] [_{\text{QP}} [_{\text{Q}} \text{much}_{<di>}] [_{\text{AP}} \text{intelligent}_{<di>}]]]]$.

⁵ According to Corver (1997), this is a contentful homophone of the dummy *much* heading QP.

Corver (1997) argues that *much*-insertion in (15b) is a more costly operation than A_0 -to- Q_0 raising.

Although Corver's (1997) account of the ungrammaticality of cases like (12) can be readily extended to explain the ungrammaticality of cases like (9a) with *tan* "so" and (10a) with *muy* "very" in Spanish, this language lacks the operation of *much*-insertion and uses a different strategy: the licensing of *-to* forms.

5. Two accounts of the distribution of Deg-heads and Q-heads

Degree modification of an AP-trace by a Deg-head is disallowed in Spanish, as shown in (9a), repeated under (16) for convenience:

- (16) * Importante, este tema no lo es tan [_{AP} t].
 important, this subject not it-is so
 "This subject is not so important."

The ungrammaticality of (16) can be accounted for, following Corver's (1997) analysis in the preceding section, by claiming that the Deg-head *tan* "so" cannot θ -bind the degree argument of the preposed adjective. However, the grammaticality of (17), involving the *-to* counterpart of *tan* "so", i.e. *tanto* "so much", cf. (9a):

- (17) Importante, este tema no lo es tanto [_{AP} t].
 important, this subject not it-is so much
 "This subject is not so important."

cannot be straightforwardly explained on the basis of Corver's *much*-insertion operation, since Spanish does not have a lexical counterpart of English *much* to insert. A possible account of the grammaticality of (17) under Corver's general approach could be based on the Q-head nature of Spanish *tanto* "so much/many", cf. section 3. If *tanto* "so much/many" is a Q-head, then it does not require A_0 -to- Q_0 raising in the configuration in (13), since a Q-head under QP can locally bind the degree argument of AP. Consequently, *-to* forms are acceptable in CLLD contexts, cf. (17), in the same way other Q-heads like *bastante* "enough" or *demasiado* "too" are, cf. (4b). However, such an approach runs into problems when we consider direct degree AP modification, as in (18):

- (18) Este tema es tan/*tanto/bastante importante.
 this subject is so/so much/enough important
 "This subject is too important/important enough."

A run of the mill Q-head like *bastante* "enough" can directly modify an AP, but not *tanto* "so much", or any other *-to* form. In such a context *tan* "so", or *-to* less counterparts in general, must occur.

Under Corver's (1997) analysis, cf. section 4, dummy *much* is excluded from direct degree AP modification on the basis of *much*-insertion being a more costly operation than A_0 -to- Q_0 raising. However, *-to* forms do not seem to involve any sort of *much*-insertion operation, and therefore, Corver's economy based account cannot be extended to explain the ungrammaticality of direct degree AP modification by *-to* elements, cf. (18).

Doetjes (2001) deals with the distributional properties of Deg-heads and Q-heads in a different way.⁶ Under her approach, degree quantifiers, i.e. Corver's Q-heads, are not heads, but rather adjuncts, whereas Deg-heads are real heads. From this basic distinction, it follows that Deg-heads impose strict selectional restrictions, whereas degree quantifiers are compatible with more categories. This approach directly derives the fact observed in section 2, cf. (5)-(6), that Q-heads in Spanish can modify a wider range of phrasal categories than Deg-heads, namely APs, NPs, VPs, AdvPs, QPs, and comparatives. Under this same approach, the fact that *-to* degree quantifiers (i.e. *tanto* "so much" or *mucho* "very much"), which have Deg-head counterparts (i.e. *tan* "so" and *muy* "very" respectively), cannot modify an AP, in contrast to other Q-heads (for instance, *bastante* "enough") which do not have a *-to*less counterpart:

- (19) a. Juan es *mucho/muy inteligente.
 Juan is very much/very intelligent
 "Juan is very intelligent."
 b. Juan es bastante inteligente
 Juan is enough intelligent
 "Juan is intelligent enough."

is explained assuming that the Deg-head form *muy* "very" blocks the occurrence of its Q-head counterpart *mucho* "very much" in (19). Deg-heads, unlike Q-heads, select only for APs.⁷ Consequently, they will block the occurrence of Q-heads in a context in which both would be in principle possible. Q-heads are just elsewhere forms occurring in contexts where Deg-heads are not possible due to selectional restrictions, i.e. as degree modifiers of non-AP categories. Other degree quantifiers, like *bastante*, do not have a Deg-head counterpart and consequently they are not blocked in the context in (19b).

This account can be extended to CLLD contexts such as the one in (16)-(17), repeated here under (20)-(21):

- (20) * Importante, este tema no lo es tan [_{AP?} t].
 important, this subject not it-is so
 "This subject is not so important."

⁶ See also Doetjes (1997) and Doetjes, Neeleman and Van de Koot (1998).

⁷ Obviously, for this account to work, it should be shown that Spanish adverbs and quantifiers are adjectival in nature, i.e. [+N, +V], see section 2.

- (21) Importante, este tema no lo es tanto [AP? t].
 important, this subject not it-is so much
 “This subject is not so important.”

under the additional assumption that the post-copular empty category in (20)-(21) does not correspond to an AP, cf. Doetjes (2001). If so, the selectional restrictions of the Deg-head *tan* “so”, would be violated, cf. (20), and the occurrence of its *-to* counterpart, i.e. *tanto* “very much”, would be triggered, cf. (21). For such an account to go through, Spanish Deg-heads must be assumed to be able to quantify on gradable adjectives only. This assumption, however, cannot be maintained, because evidence to the contrary is available in Spanish. Consider, for instance, the case of gradable predicative nouns such as *amigo* “friend” in (22):

- (22) a. Juan y Julia no son tan/*tanto amigos
 Juan and Julia not are so/so much friends
 b. ¿Cuán/*cuánto amigos son Juan y Julia?
 how/how much friends are Juan and Julia
 c. Juan y Julia son muy/*mucho amigos.
 Juan and Julia are very/ very much friends

In spite of the fact that an uncontroversial noun like *amigo* “friend” follows the degree word, *-to*less forms, i.e. Deg-heads, are the only possibility, while *-to* elements are banned. Moreover, as illustrated in (23), Q-heads like *bastante* “enough” and *demasiado* “too” are also fine as degree modifiers of a noun.

- (23) Juan y Julia son bastante/demasiado amigos.
 Juan and Julia are enough/too much friends

Therefore, we conclude that the distribution of Deg-heads and Q-heads cannot be accounted for just on the basis of the selectional properties of Deg-heads plus an Elsewhere Condition for the distribution of the Q-heads.⁸ As shown in (22), Deg-heads are possible as degree quantifiers of nouns as well as degree modifiers of adjectives.

6. Unpronounced MUCH and Spanish *-to* nominals

Our account of the distribution of the Deg-heads and their Q-head counterparts, i.e. *-to* elements, in (7)-(8) relies on Corver’s (1997) analysis of *much*-support. We would like to claim that *-to* elements, and Q-heads in general, license an

⁸ Note that the fact that a Deg-head can co-occur with a noun does not pose any problem for Corver’s (1997) account. Provided that the noun *amigo* “friend” in (22) has a degree argument, this argument can in principle be bound by a Deg-head. Under this approach, the ungrammaticality of *-to* Q-heads in these cases is, however, unexpected, see also (18) for discussion.

unpronounced MUCH head, in line with recent research in Kayne (2002b)⁹. In particular, CLLD contexts such as the one in (17) involve the configuration in (24):

- (24) Importante, este tema no lo es [QP tanto_i [Q MUCH<di>] [AP t<di>]].
 important this subject not it is so much
 “This subject is not so important.”

As shown in (24), unpronounced MUCH copies the degree argument of the adjective, so that it can be θ -bound by the degree quantifier *tanto* “so much”. This is essentially the role played by overt *much* in Corver’s (1997) analysis of the analogous English *so*-pronominalization contexts in (14a). This proposal straightforwardly derives the distribution of *-to* Q-heads and *-toless* Deg-heads, cf. (7)-(8): whenever a degree argument of a gradable adjective/noun cannot be locally bound by a Deg-head, in the sense of locality discussed in section 4, unpronounced MUCH must occur. In (18) and (22) *-to* Q-heads are excluded, since a Deg-head, i.e. *tan* “so”, *muy* “very” or *cuán* “how”, can locally bind the degree argument of the adjective without unpronounced MUCH. In all cases in which there is no Deg-head available or A₀-to-Q₀ raising is not possible, cf. (24) or (10a), a degree quantifier (Q-head) licenses MUCH.¹⁰

Now the question arises of why overt *much*-insertion can rescue a derivation in which a Deg-head binds the degree argument of an AP pro-form in English, whereas, in Spanish, unpronounced MUCH cannot. That is, we are looking for the reason of the contrast in (25):

- (25) a. The weather was *hot* in Cairo – [so **much** *so* that we
 stayed indoors all day]. cf. (14a)
 b. * Importante, este tema no lo es tan MUCH [AP t].
 important, this subject not it-is so
 “This subject is not so important.” cf. (24)

In (25a), *much*-insertion copies the degree argument of the *so* pro-form, and allows local binding of this argument by the Deg-head. Following the same line of reasoning, unpronounced MUCH would have the same impact on (25b), but the output is still ungrammatical. We would like to claim that the licensing

⁹ The idea of an unpronounced MUCH as complement of a quantifier like *enough* goes back at least to Jackendoff (1977).

¹⁰ This account leaves open the possibility that in certain varieties MUCH could be overt. This might be the case in certain northern varieties of Mexican Spanish where sequences such as the one in (i) are attested:

- (i) bastante muy disgustado
 enough very upset
 “upset enough”

Muy “very” in (i) could be analyzed as an overt counterpart of MUCH.

conditions on overt *much* and unpronounced MUCH are somehow different. In fact, unpronounced MUCH is more limited in its distribution than overt *much*. The condition in (26) derives the desired results:

- (26) Unpronounced MUCH is licensed by a +N element.¹¹

Tan “so” is clearly a non nominal category from a morpho-syntactic point of view in Spanish: it lacks number or gender features characteristic of adjectives and nouns in this language. Thus, according to (26), *tan* “so” or any Deg-head in Spanish, cf. (7), cannot license unpronounced MUCH, and consequently Deg-heads are excluded from CLLD contexts such as the one in (25b). On the other hand, Q-heads, including *-to* elements are nominals, more specifically adjectives, and as such, they have number and gender features, as shown in (27):

- (27) *demasiado-a-os-as* “too much/many-(masc-sing)-(fem-sing)-(masc-pl)-(fem-pl)”
bastante-s “enough-(masc/fem-sing)-(masc/fem)-pl”
tanto-a-os-as “so much/many-(masc-sing)-(fem-sing)-(masc-pl)-(fem-pl)”,
mucho-a-os-as “much/many-(masc-sing)-(fem-sing)-(masc-pl)-(fem-pl)”,
 etc.

These nominals, as opposed to Deg-heads, are able to license unpronounced MUCH, and therefore they can appear in CLLD contexts in Spanish. In sum, the distributional properties of Deg-heads and Q-heads are determined by licensing of a MUCH head in Spanish. Unpronounced MUCH in Spanish has the same semantics as its English overt *much* counterpart, although they differ in the licensing conditions: licensing of MUCH, as opposed to *much*, seems to be determined by (26).

Alternatively, it could be the case that the licensing of MUCH is only indirectly related to the +N character of the quantifier modifying it. The relevant factor in the licensing of MUCH would rather be agreement between the degree quantifier and MUCH. Thus, only agreeing degree quantifiers can license MUCH in Spanish, cf. (27). This property correctly distinguishes Q-heads like *-to* elements, and *bastante* “enough” or *demasiado* “too much/many” from Deg-heads like *muy* “very”, *tan* “so” or *cuán* “how”. The former are all agreeing nominals, whereas the latter show no agreeing forms in the language. From this account also follows in a direct way the fact that degree quantifiers do not agree in ϕ -features with the adjectives they modify (*bastante(*s) grandes* “enough- \emptyset big-pl”): degree quantifiers agree with the unpronounced MUCH head they modify, which is masculine and singular.

¹¹ This condition has been suggested in Kayne (2002b).

7. Unpronounced MUCH and degree adverbials in English

Although an analysis of adjectival degree modification in English falls beyond the scope of this paper, we would like to consider the import of the proposals made in the preceding sections to an account of the syntactic properties of the degree modifier *very*. *Very* shares many properties with degree *-ly* adverbials like *terribly* or *extremely*. For instance, *very* or *extremely*, as opposed to degree heads, do not trigger degree fronting, cf. Hendrick (1990), Corver (2001), Kayne (2002b), Matushansky (2002), as shown in (28):

- (28) a. so/too interesting a movie
 b. * very/extremely interesting a movie

In addition, *very* and degree adverbials seem to occupy the same syntactic position in the extended projection of adjectival phrases, i.e. following Deg-heads and preceding the AP, cf. (11), as shown in (29):

- (29) This movie is so very/extremely interesting that ...

Nonetheless, *very* contrasts with *-ly* adverbials with respect to *much*-support in *so*-pronominalization contexts, as shown in (30):

- (30) a. John was nervous, as a matter of fact extremely (??? much) so.
 cf. Corver (1997: 155)
 b. John was nervous, as a matter of fact very *(much) so.

-ly adverbials are incompatible with *much*-support, cf. (30a), whereas *very* requires *much*-support, cf. (30b). Under the approach sketched out in section 6, the distinction between *very* and *-ly* adverbials can be stated as follows: *very*, as opposed to *-ly* adverbials,¹² is a $-N$ lexical element¹³. Therefore, *very* cannot license MUCH in *so*-pronominalization contexts, as shown in (37):

- (37) very [QP [Q *MUCH/much] [AP SO]].
 -N

Therefore, *much*-insertion will be required in (37) as a last resort operation, despite the fact that *very* is not a Deg-head in English.

8. Conclusion

In this paper we have provided an account of the distribution of Deg-heads and Q-heads in Spanish as a function of the licensing of unpronounced MUCH. We have argued that MUCH must be licensed by a $+N$ modifier, or alternatively

¹² See Déchaine and Tremblay (1996), Baker (2003) among others for the claim that *-ly* adverbials, as well as Spanish *-mente* adverbials, are categorially nominals.

¹³ See also Kayne (2005c), p. 153, on French *très* “very”.

through agreement with a +N modifier. Moreover, we have integrated the licensing of MUCH into Corver's (1997) Split-DegP Hypothesis and determined the licensing conditions on MUCH and overt *much*. Thus, a typology of syntactic operations enabling local θ -binding of a degree argument by a degree expression emerges. This typology includes A_0 -to- Q_0 raising in the case of Deg-heads, licensing of MUCH in the case of degree quantifiers and adverbials, and *much*-insertion in *so*-pronominalization contexts. Under the assumption that locality in θ -binding is in fact an interface condition, all the above cases come out as related strategies to meet readability at the C-I interface.¹⁴

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¹⁴ The interpretation of *-ly* adverbials like *extremely* in *extremely dangerous* seems to involve θ -identification of the external argument of the adjectival modifier with the degree argument of the adjective, rather than θ -binding. However, as argued in Higginbotham (1985), θ -identification must also be local. Therefore, the syntax of degree adverbials should involve similar strategies in order to meet locality at the C-I interface.

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