Gradability in the nominal domain

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Chapter 1 INTRODUCTION

This dissertation is an investigation of gradability in the nominal domain, aiming to uncover whether and how gradability is manifested in the nominal domain, as well as the implications this could have for theories of the representation of gradability.

Gradability has been studied mostly within the adjectival domain, where different proposals have been made as to its semantic and syntactic representation, though the cross-categorial nature of gradability has also been recognized (Sapir 1944, Bolinger 1972, Bresnan 1973, Maling 1983, Doetjes 1997, Sassoon 2007a etc.). To arrive at a proper understanding of gradability and its representation, its cross-categorial nature must indeed be fully acknowledged and its manifestations across the various categories systematically investigated. Since such an undertaking would extend well beyond the limits of one dissertation, we will confine ourselves to a study of gradability in the nominal domain here, hoping to make in this way one step in that direction.

While in the adjectival domain there is consensus as to what gradability is and how it can be diagnosed, the manifestations of gradability become much less straightforward outside of this domain. It is not easy to find unequivocal criteria based on which nouns can be characterized as gradable. As will be shown in this dissertation, different tests single out different sets of nouns as being gradable. The environments that have been claimed at some point or other to involve gradability often turn out to be sensitive to other factors such as the expression of a value judgment, or the evaluation of whether a property holds or not, rather than to 'pure' gradability. Even in those cases which at first sight seem to provide most reliable indications of the gradable nature of nouns, such as the type of modification seen in *a big idiot*, the facts do not ultimately support an analysis of the respective modifiers as adnominal degree modifiers or operators, and what looks like a degree interpretation (i.e. an interpretation that is similar to those obtained by degree modification in the adjectival domain) is brought about by different mechanisms. In sum, the gradability of nouns turns out to be much more elusive than in the case of adjectives, and much harder to access and manipulate grammatically, if at all. This will lead us to conclude that, at the lexical level, nouns are fundamentally different from adjectives with respect to gradability, more precisely, that they lack the kind of gradability we know from the adjectival domain.

This chapter will first introduce the notion of gradability and the ways it has been approached in the literature, mainly in relation to the adjectival domain, as well as from a cross-categorial perspective. The second part of the chapter tackles the basic

question of how to identify a gradable noun. This section will give an overview of the tests for gradability in the nominal domain that have been used in the literature and show the difficulties that emerge as to finding reliable diagnostics and establishing the status of nouns from this points of view. It thus serves to set the scene for the rest of the dissertation. Section 3 provides an outline of the dissertation.

1 Background and preliminary remarks

Gradability has been mostly approached in relation to adjectives, where it is signalled by the availability of modification by specialized elements, such as *very* (e.g. *very smart*), and by the possible occurrence of the adjective in specialized degree constructions, such as the comparative (e.g. *smarter than John*). Various semantic and syntactic proposals have been put forth in the literature in order to capture this phenomenon. The first part of this section will review the ways in which gradability in the adjectival domain has been approached, briefly outlining the main semantic approaches to the phenomenon.

Although to a lesser extent, the cross-categorial nature of gradability has also been recognized. This has been based on two types of observations. On the one hand, there are modifiers like *more* etc. which can modify not just gradable adjectives, but can also combine with other syntactic categories as in *He ate more soup than me* and *He works more than his brother*. On the other hand, expressions can be found in these other lexical categories as well which seem to denote properties that may be conceived of as holding to a higher or lesser degree. For example, one may be more or less of an idiot, one may like something more or less etc. A consideration of the cross-categorial nature of gradability has immediate consequences for its (semantic and syntactic) representation. These issues will be introduced in the second part of this section, with particular focus on the nominal domain.

A note on the terminology used is in order before proceeding. Throughout this dissertation we will use the term "gradable" to refer to expressions which denote properties that may hold of entities to a higher or lower degree, or whose domain is ordered (see also coming sub-sections for a more precise definition). These have also been referred to in the literature as "degree" (Bolinger 1972) or "scalar" expressions (e.g. Matushansky 2002a,b,c a.o.). We will, however, reserve the term "degree" for those expressions which can modify or operate on gradable expressions and give rise to this particular sort of interpretation. Therefore, we will be talking about "degree words/ modifiers/ operators/ constructions" to refer to expressions such as *very*, *too*, comparatives etc. As for "scalar", we take it to be a more general term which simply describes an expression that has some relation to a scale in the sense of Horn (1972, 1989). There are, for example, expressions which are not gradable themselves and are not degree operators either, but which are scalar in the sense that they may introduce a scale. (*Even*-elements, for example, have been

analysed by Giannakidou (2007) a.o. as imposing an ordering of individuals on P, the predicate of the clause, with respect to a likelihood scale.)

1.1 An introduction to gradability: the view from the adjectival domain

Gradability has been studied mostly in the adjectival domain, in relation to a sub-class of adjectives. In this section we will introduce the notion of gradability and the ways it has been approached in the literature, mainly from the adjectival perspective. We will subsequently turn to considering gradability from a cross-categorial perspective in §1.2, mainly in relation to the nominal domain, which is the focus of this dissertation.

Adjectives are generally assumed to fall into two categories, gradable and non-gradable (Sapir 1944, Bolinger 1972, Maling 1983, Bierwisch 1989 etc.), depending on how easily the properties they express can be viewed as holding of their subject to a greater or lesser degree. This is reflected in different distributional patterns with respect to degree expressions. Compare, for instance, (1) and (2):

(1) a. an intelligent child
b. a {very/ more/ less} intelligent child

(2) a. a parliamentary speech
a'. an Italian film
b. *a {very/ more/ less} parliamentary speech
b'. *a {very/ more/ less} Italian film

A gradable predicate such as *intelligent* in (1) expresses a property that may be manifested to a greater or lesser degree and is thus compatible with modifiers or constructions that express varying degrees of the respective property, such as *very* and the comparative, respectively. In contrast, non-gradable predicates like those in (2) are either true of an individual or not and, as such, cannot co-occur with degree modifiers like *very* and be used in degree constructions such as the comparative.

It should be noted, however, that the distinction is not as clear-cut as it may seem at first sight, and under certain circumstances non-gradable predicates can be coerced into a gradable use (in the presence of degree modifiers like *very*, *too* etc.). Consider the following example:

(3) He is so Italian!

In this sentence, the individual is said to 'have many of the properties typically associated with being Italian', rather than being said to simply have the respective nationality. The adjective is shifted into a gradable meaning. Even in (2)b above, the adjective *Italian* could plausibly be coerced into a gradable meaning so as to describe a film that is not Italian *per se*, but has a number of properties typically

associated with Italian films. This shift in meaning has been referred to as "scalarity coercion" (cf. Matushansky 2002b).

There are two main approaches to gradability in the literature: degree-based and degree-less ones. In a degree-based approach adjectives have a degree argument (Cresswell 1976, von Stechow 1984 etc.), or are analysed as functions mapping objects to degrees on a scale (Bartsch and Vennemann 1973, Kennedy 1999a,b, 2007a). In this type of approach, a sentence such as *John is tall* will mean something like 'John is tall to a degree *d*', or 'John's tallness equals *d*'. In degree-less approaches, the meaning of an adjective is that of a context sensitive or vague predicate (Klein 1980, 1982, Larson 1988, Van Rooij 2008, to appear, Doetjes, Constantinescu and Součková 2011). As such, *tall* would correspond to 'a contextually determined set of tall individuals'. In what follows we will briefly outline each of these approaches.

1.1.1 Degree-based approaches to gradability

Degree-based, or 'relational', theories of gradability take gradable adjectives to have an additional open variable slot of semantic type *d* (degree) (Seuren 1973 , Creswell 1976, Hellan 1981, von Stechow 1984, Heim 1985, 1995/1999, 2000, 2006, Bierwisch 1989, Kennedy 1999, Lechner 1999, Matushansky 2002a,b, Bhatt and Pancheva 2004 a.o.). Most authors who opt for a relational account take degrees to be part of the argument structure of gradable adjectives, in addition to e.g. their external argument, therefore their semantic type is $<d,<e,t>>$. Alternatively, gradable adjectives have been analysed as measure functions from individuals to degrees, hence, of semantic type $<e,d>$ (Bartsch and Vennemann 1973, Kennedy 1999a,b, 2007a).

On either version, the degree variable is explicitly written into the lexical entry of the adjective.[1] *x is A* will be true if the projection of *x* on the scale associated with the adjective A is at least as high as the norm or standard degree d_s, for the relevant comparison class, which is the subset of the domain which is selected in a given context, and with respect to which $A(x)$ is interpreted.

As for the sort of objects degrees are, two main views have emerged: they have been analysed either as points on a scale, by analogy with temporal arguments (von Stechow 1984, Heim 1985 etc.), or as intervals (Seuren 1973, Bierwisch 1989, Kennedy 1999, Schwarzschild 2005, Schwarzschild and Wilkinson 2002).

In a degree-based system, adjectives do not start out as predicates of type $<e,t>$ and have to be turned into predicates at some point of the derivation. If they are of type $<d,<e,t>>$, then the $<d>$ argument must be bound first, before the external argument is merged.[2] In case an overt degree operator, such as the comparative, is present, this degree operator will bind the degree variable and turn the adjective into

[1] For an account of the theta-relations involved, see Zwarts (1992), Doetjes (1997).

[2] The same holds in the alternative measure-function analysis, on which they would be of semantic type $<e,d>$. For reasons of simplicity, however, we will henceforth only illustrate the degree-based approach with the $<d <e,t>>$ type.

a predicate. The comparative structure is usually analysed as involving a comparison between degrees, as in (4)a (cf. Kennedy and McNally 2005: 369).[3]

(4) a. [[-er/more than d_a]] = $\lambda A\, \lambda x.\, \exists d\, [\, d > d_c \wedge A(d)(x)\,]$
b. Chris is taller than Alex is [AP e]
c. $\exists d[d > d_a \wedge \mathit{tall}(d)(\mathit{Chris})]$
(where d_a is the maximal degree such that Alex is *d*-tall)

Similarly, measure phrases have been argued to saturate this position. This has in fact been one of the most important arguments in favour of postulating the degree argument position in adjectives (cf. Kennedy 1999a, but see Schwarzschild 2005 for a different view).[4] In the absence of an (overt) degree operator, turning the adjective into the right semantic type is taken care of by a null degree operator, *pos*. In addition, *pos* makes sure the adjective gets a non-neutral interpretation. As shown in (5), the comparative in (5)a does not entail (5)b, i.e. that Chris is tall. This is so because the positive in (5)b is interpreted non-neutrally, as in (5)c. The non-neutral, "above the standard or average" interpretation is attributed to the presence of *pos*.

(5) a. Chris is taller than Alex is.
b. Chris is tall.
c. Chris is taller than a contextually determined standard of tallness .
d. Chris is [*pos* tall]

In fact, as will be discussed in the next sub-section, most of the criticism against the degree-based approach has been directed at the postulated null operator *pos*, both due to considerations pertaining to the adjectival domain and to considerations that arise when gradability beyond the nominal domain is taken into account.

This semantics of gradable adjectives is usually associated with a particular syntax, namely with the projection of a particular functional structure, the Degree Phrase, which hosts the elements performing the relevant semantic operations. There are two main views in the literature in this connection. On one view, DegP occupies the Spec position of the AP and the comparative or other dependent clauses are complements to Deg^0 (Bresnan 1973, 1975, Jackendoff 1977, Heim 1985). On the alternative view, Deg^0 takes AP as its complement (Abney 1987, Corver 1990, 1997, Zwarts 1992 etc.).[5] Doetjes (1997) and Neeleman, van de Koot and Doetjes (2004) argue for the necessity of making syntactic distinctions among degree expressions,

[3] For a quantificational account of degree operators such as the comparative, equative, *too*, *enough* etc., see von Stechow 1984, Heim 1985, 2000, Matushansky 2002a, Meier 2003 a.o.

[4] See also Svenonius and Kennedy (2006) for a different implementation of the analysis of the syntax and semantics of measure phrases

[5] See Bhatt and Pancheva (2004) for a recent discussion and evaluation of the two approaches and a solution to their problems by proposing an intermediate analysis in which Deg is base-generated in SpecAP, without a complement, thus allowing it to be adjacent to the adjective (as in the Deg^0-AP analysis), while the complement clause is late merged in the position where the degree operator is moved to its scope position by quantifier raising (QR) (which accounts for the surface position of the clause) (but see Grosu and Horvath 2006 for criticism of such an approach).

Other types of structures have also been proposed in the literature: Lechner (1999) proposes that AP is in the Spec of DegP, and Izvorski (1995) proposes a DegP-shell analysis.

roughly in terms of their being heads or adjuncts, which reflects their selectional properties: the former would exclusively select adjectives, while the latter would be compatible with all syntactic categories as long as they have the right sort of meaning.

1.1.2 Degree-less approaches to gradability

1.1.2.1 Vague predicates and degree functions

According to degree-less, or "vague predicate", theories, gradable and non-gradable adjectives are expressions of the same semantic type: they denote functions from objects to truth values, and are interpreted as properties of individuals (cf. Kamp 1975, Klein 1980, 1982, Larson 1988, Van Rooij 2008, to appear). What makes gradable adjectives special is that their domain is inherently organized as a partial ordering along some dimensional parameter. Such adjectives will partition the domain, according to a contextual norm value or standard, into a positive extension, including those individuals to whom A applies, a negative extension, which contains those individuals to whom A does not apply, and an extension gap, including those individuals for whom A(x) is not defined. In other words, while non-gradable adjectives denote complete functions, gradable adjectives denote partial functions.

For example, take a domain D of some model as being made up of John, Peter and Bill, and assume an ordering of D according to the dimension of height. Suppose Alex's height is 1.60m, Chris' 1.76m, and Bill's 2.01m. This will result in the set {Alex, Chris, Bill,}. A gradable adjective such as *tall* partitions this ordered domain into subsets relative to a standard *s*, whose value can vary from context to context. For example, Chris could be tall for a teenager, but short for a basketball player. In the latter context, *tall* might impose a partitioning into the positive extension cell $tall_{pos}$ = {Bill} and the negative extension cell $tall_{neg}$ = {Alex, Chris}. Then, the proposition *Bill is tall* comes out as true in the given context, because Bill $\in$ $tall_{pos}$.

In a degree-less approach, therefore, adjectives such as *tall* are interpreted as the property of being *tall*, where what counts as *tall* depends on the context. In this type of analysis, the relation between the subject of predication and the degree to which the property denoted by the adjective holds of the subject is not directly encoded in the semantics of the adjective, but specified indirectly via the ordering of the domain and the contextual standard value. In other words, gradability is not a matter of degrees but a matter of the presence of a (salient) ordering. Consequently, the adjective does not have a degree argument. As such, *pos* is not necessary in the positive form, and relations between degrees are not made use of in the semantics. Instead, degree structures, such as the comparative, are represented as relations between degree functions.

A degree function performs the role normally played by context, in the sense that it fixes the denotation of the adjective, ultimately determining how the domain is to be partitioned. To illustrate, consider a comparative such as *Chris is taller than Alex is* in (6)b. The contribution of the comparative here is to partition the domain of *tall* in such a way that Chris in (6)b is tall and Alex is not. Klein (1982) captures this by

making use of quantification over degree functions, and defining the comparative in terms of a combination of conjunction and negation:[6]

(6) a. $x_0 >_\zeta x_1$ iff $\exists\delta\ [(\delta(\zeta))(x_0) \wedge \neg(\delta(\zeta))(x_1)]$
(where $>_\zeta$ defines the comparative relation for a vague predicate ζ, and δ is a degree function)
b. Chris is taller than Alex is [AP e]
c. $\exists\delta[(\delta(\text{tall}))(\text{Chris}) \wedge \neg(\delta(\text{tall}))(\text{Alex})]$

According to (6)c, (6)b is true in case there is a degree function that, when applied to *tall*, induces a partitioning of the domain so that the positive extension includes Chris, while the negative extension includes Alex.[7]

In order to make this work, one has to make sure that the degree functions that can be made use of are consistent. This is taken care of by the Consistency Postulate in (7) (Klein 1982: 126):

(7) Consistency Postulate (CP)
$\forall x_0 \forall x_1 \forall Q\ [\exists\delta\ [((Q))(x_0) \wedge \neg\delta(Q))(x_1)] \rightarrow \forall\delta\ [(\delta(Q))(x_1) \rightarrow \delta(Q))(x_0)]]$
(where Q is a predicate variable, and δ is a degree function)

This is a general constraint to which possible degree functions are subject. For an example like *Chris is taller than Alex* this will exclude the possibility that there exist two different degree functions such that one of them would make Chris taller than Alex while the other would make Alex taller than Chris. Without the CP, this problematic possibility might arise, given the use of the existential quantifier in (6)a.

One of the advantages of such a degree-less approach is that it does not need to posit the null *pos* marker for the unmodified form of the adjective. Klein argues that a theory without *pos* has to be preferred, as proposals that make use of *pos* "fail to account for the fact that across a wide variety of languages the positive is formally unmarked in relation to the comparative" (Klein 1980: 2). In his view, *pos* is merely a device to "fix the semantics". However, one could object to this that *pos* in (5) might be seen as a default degree operator that introduces a standard of comparison, and as such might be predicted to usually surface as a null operator cross-linguistically.

On the other hand, one of the problematic parts of Klein's theory is the interpretation of the *than*-clause. When looking at the properties of *than*-clauses, there is strong evidence in favour of treating them as involving an operator–variable structure: the *wh*-operator may be overt in some languages (e.g. Italian, Bulgarian etc.), and *than*-clauses display typical locality effects (cf. Ross 1967, Bresnan 1975, Chomsky 1977, Pinkham 1982 , Izvorski 1995, Kennedy and Merchant 1997 etc.). The operator–variable structure is easily captured by degree-based approaches,

[6] We have replaced Klein's original *d* for degree function with *δ*, following Doetjes, Constantinescu and Součková (2011), in order to avoid confusion with degrees, which are usually represented as *d*.

[7] The difference between the contextual partitioning obtained in the positive, and that induced by a degree function is that the latter is bipartite, it does not contain an extension gap. In other words, the result of applying a degree function to a gradable adjective is a complete function.

which treat the *than*-clause as involving abstraction over degrees. In contrast, under a Klein-type approach, which maps the information contributed by the *than*-clause into a structure containing a conjunction plus a negation, it is less obvious how the properties of *than*-clauses can be accounted for. There is, however, a recent proposal within the degree-less framework which solves this compositionality issue, namely that of Doetjes, Constantinescu and Součková (2011), which will be presented in more detail in the next sub-section.[8]

1.1.2.2 A neo-kleinian approach to gradability

As discussed above, one of the criticisms against degree-less approaches such as Klein (1982), which represent comparatives in terms of conjunction and negation of degree functions, was that it cannot compositionally account for *than*-clauses. An alternative degree-less account that circumvents the problems faced by the original Kleinian analysis, while still not requiring the postulation of additional covert operators, has been recently proposed by Doetjes, Constantinescu and Součková (2011) and Doetjes (2009).

As usual in a degree-less approach to gradability, the meaning of a gradable expression is that of a context-sensitive or vague predicate. Gradability is not a matter of degrees but a matter of the presence of a (salient) ordering, and degree structures are represented as relations between degree functions. These can easily be translated into set inclusion relations. This is shown in (8), where δ is a degree function and A stands for a gradable adjective:[9]

(8) $\delta 1 >_A \delta 2$ iff $\delta 1(\mathrm{A}) \subset \delta 2(\mathrm{A})$
(where $>_A$ expresses an ordering relation between *δ1* and *δ2* corresponding to 'being more restrictive/informative')

[8] There is also a different type of degree-less approach in the literature: Neeleman, van de Koot and Doetjes (2004) propose an alternative formalization, based on second-order quantification, according to which a gradable adjective is a set of properties ordered by strength (but otherwise identical). Since a gradable adjective like *tall* denotes a set of predicates (expressing a variable degree of length, ranging from zero to infinity), it cannot be directly applied to an individual; a set must first be selected from this set of sets. This is what merger of a degree expression achieves. In the absence of an overt degree expression, i.e. in the case of APs in the positive form, a covert operation must be postulated to reduce the adjective to a single property. This is parallel to the role *pos* plays in turning the AP into the right sort of predicate in degree-based approaches. The need for this sort of mechanism therefore makes this approach prone to the same sort of criticism that has been raised in connection with degree-based approaches.

Bale (2006) similarly proposes representing gradability in terms of equivalence classes, i.e. the set of all individuals which are in an equivalence relation with respect to a particular ordering relation corresponding to an adjective. Equivalence classes have also been used to define degrees in the degree-based framework by Cresswell (1976). Bale's own account is situated in between the two types of approaches. He does not make use of degrees to define the basic type of gradable adjectives, but defines them as relations between individuals (e.g. *beautiful* is the relation *x has as much beauty as y*), which still makes them fundamentally different from non-gradable adjectives. Subsequently, though, the equivalence classes forming the basic scale associated with an adjective are mapped to degrees (on a universal scale); and degree structures, such as the comparative, are defined as relations between such degrees.

[9] Or, alternatively: $\delta 1(\mathrm{A}) \cap \delta 2(\mathrm{A}) = \delta 1(\mathrm{A})$, where $\delta 1(\mathrm{A}) \neq \delta 2(\mathrm{A})$

As already mentioned, the degree functions that can be made use of are subject to a general constraint, namely the Consistency Postulate (cf. Klein 1982) repeated here for convenience:

(9) Consistency Postulate (CP) [=(7)]
$\forall x_0 \forall x_1 \forall Q\, [\exists \delta\, [((Q))(x_0) \wedge \neg \delta(Q))(x_1)] \rightarrow \forall \delta\, [(\delta(Q))(x_1) \rightarrow \delta(Q))(x_0)]]$
(where Q is a predicate variable, and δ is a degree function)

As shown by Doetjes, Constantinescu and Součková (2011), as a result of the CP, the degree functions are nested: they are ordered with respect to one another, from least to most restricted, or maximally informative. The ordering between the different *δ*s reflects the ordering in the domain of the adjective. This is illustrated in Figure 1, where the upward arrow indicates that the highest ordered individual is on top and the brackets indicate which individuals are included when a given degree function applies to the ordered set A (corresponding to a gradable adjective) which consists of the individuals *a*, *b*, *c* and *d*. The most restricted, or maximally informative, degree functions are those which, when applied to a gradable adjective, result in the most restrictive subset that includes the individuals which are ordered highest. This would thus correspond to the highest, or maximal, degree in a degree-based approach. In the situation depicted in Figure 1, for instance, *δ1* is the most restrictive, or maximally informative, degree function.[10]

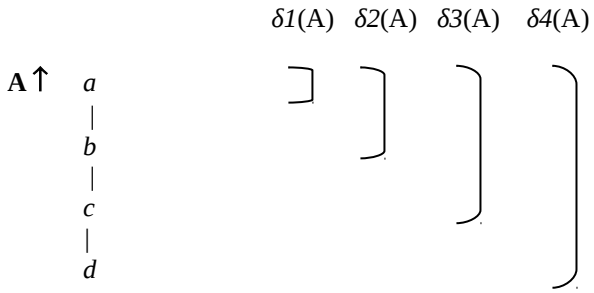

Figure 1: The ordering of degree functions (Doetjes, Constantinescu and Součková 2011)

For a more concrete example, consider the English expressions *quite*, *very*, *extremely* etc.: they correspond to degree functions which can be intrinsically ordered with respect to one another. In fact, the ordering of these expressions is independent of the adjective to which they are applied: *quite* > *very* > *extremely*, that is, *extremely* always results in a more restricted set than *very* etc. Note that when a

[10] Note that Doetjes, Constantinescu and Součková (2011) define the ordering relation in terms of more or less restricted. Thus, $\delta 1 <_A \delta 2$ expresses that δ1 is more restricted than δ2, while the *than*-clause introduces a minimality operator, which selects the minimal or most restricted δ out of the set defined by the operator variable structure in the *than*-clause. Here, we use the adapted version adopted by Doetjes (2009), where the ordering between the functions ranges from the minimally informative to the maximally informative degree function (cf. Beck and Rullmann 1999). This makes the analysis more transparent to readers used to degree-based approaches.

less restrictive degree function (e.g. *quite*) is applied to an adjective, this will result in a set which includes the subsets that would result from applying a more restrictive degree function (e.g. *extremely*): e.g. $\delta_{extremely} \subset \delta_{quite}$. In other words, the individuals that are ordered highest in the domain will also be included in the subsets resulting from applying the less restrictive degree functions. This is in fact how monotonicity can be expressed in such a degree-less approach, as compared to a degree-based approach which would say that a set of degrees will include all lower degrees.

Unlike Klein's original approach, the alternative proposed by Doetjes, Constantinescu and Součková (2011) captures the semantic contribution and structure of the *than*-clause, thus removing one of the weak points of the original degree-less approach. Doetjes et al. propose that clausal comparatives involve a comparison of degree functions, thus making use of the ordering relation between the degree functions. More precisely, the *than*-clause defines the most restrictive, or maximally informative, degree function that, when applied to the adjective in the main clause, results in a set including its subject. In order for the comparative to be true, there should be a more restrictive or informative degree function that, when applied to A, includes the subject of A. A simplified version of the analysis is given in (10)b, where δ2 is the maximally informative degree function including Carmen when applied to *tall* and is provided by the *than*-clause; $>_{tall}$ expresses an ordering relation between δ1 and δ2 corresponding to 'being more restrictive, or informative' as defined in (8).[11]

(10) a. Alice is taller than Carmen is
b. $\exists\delta1[(\delta1(\text{tall}))(\text{Alice}) \& \delta1 >_{tall} \delta2]$

The immediate advantage of this modification of Klein's theory is that it predicts that *than*-clauses involve an operator variable structure, as they involve an abstraction over degree functions. The exact way the *than*-clause is interpreted depends on the type of comparative involved: (i) ordinary clausal comparatives as in (10)a; (ii) subcomparatives involving absolute comparison (such as *The table is longer than it is wide*); and (iii) subcomparatives with a relative interpretation (e.g. *Ben is funnier than Steve is rich* – cf. Kennedy's 1999a, 2001 "comparison of deviation", or Bale's 2006, 2008 "indirect comparison").

Doetjes, Constantinescu and Součková (2011) and Doetjes (2009) show that this analysis can account for certain other phenomena at least as well as degree-based approaches, in particular for comparative phenomena such as cross-polar anomalies (i.e. the impossibility to directly compare adjectives of opposite polarity: *??Alice is shorter than Carmen is tall*), comparison of deviation, incommensurability. These are phenomena in connection with which the introduction of degrees as new objects in the ontology had been argued to be necessary. Kennedy (1999a), but also Bierwisch (1989), argue that an analysis in terms of a partitioning of the domain is not sufficient to account for them. See Doetjes, Constantinescu and Součková (2011) and Doetjes (2009) for details.

[11] Given the scenario depicted in figure 1, if A is *tall*, *a* is Alice and *c* is Carmen, the sentence will come out as true, as the maximally informative *δ* such that *δ*(*tall*) includes Carmen (*c*) is *δ3*, and there is a more informative δ such that *δ*(*tall*) includes Alice (*a*) (namely, *δ1* or *δ2*).

In this dissertation, we assume a degree-less approach to gradability is, a priori, the simplest type of account, as it does not require any additional semantic and syntactic machinery, and this advantage becomes clearer especially when gradability across categories is considered. Nevertheless, alternative approaches will be discussed whenever such considerations are relevant.

1.2 Gradability beyond the adjectival domain

Although most of the semantic and syntactic work on gradability has focused on adjectives, remarks on the cross-categorial nature of gradability can be found as early as Sapir (1944) and Bolinger (1972), in particular, who studies gradability across categories in depth (though he does not provide a formal account), as well as in Bresnan (1973), Maling (1983), Doetjes (1997), Paradis (2001), Kennedy and McNally (2005), Sassoon (2007a). In this section we will raise the question of where gradability is to be found outside of the adjectival domain. The discussion serves to introduce some of the issues that will be addressed in this dissertation.

There are two directions from which gradability has been approached outside of the adjectival domain. One is prompted by the observation that cross-linguistically degree modifiers can be found which can combine with other lexical categories as well. These are expressions such as *more*, *enough*, *less* in English, *trop* 'too(much/many)' in French, *atât* 'so(much/many)' etc. in Romanian. These are the so-called "degree quantifiers", to use the term introduced by Doetjes (1997), which can combine with (gradable) adjectives, (certain types of) verbs, and with plural and mass nouns:[12]

(11)	[English]	[French]	[Romanian]
a.	more intelligent	trop intelligent	atât de inteligent
		'too intelligent'	'so intelligent'
b.	more wine (than water)	trop de vin	atâta vin
		'too much wine'	'so much wine'
c.	more books (than pens)	trop de livres	atâtea cărţi
		'too many books'	'so many books'
d.	to sleep more (than Peter)	trop dormir	a dormi atât
		'to sleep too much'	'to sleep so much'

Note that while (11)a is about the degree (of intensity) to which a property holds, and which is said to exceed the degree to which someone else is intelligent, the cases illustrated in (11)b-d involve quantity readings, or what Bolinger (1972) would call "extensively" gradable interpretations. (11)b, which contains mass nouns, compares amounts of stuff, while (11)c, with plural nouns, compares the number of entities. Verbs pattern with nouns: (11)d is not understood in terms of the degree to which the

[12] See Corver (1997a,b), Doetjes (1997) and Neeleman, van de Koot and Doetjes (2004) who distinguish two classes of degree expressions, based on distinct syntactic behaviour: those degree words that can only combine with APs and those that can combine with other lexical categories as well (though they provide different accounts).

property denoted by the verb is manifested in an entity, but in terms of "quantity" of the activity, i.e. in terms of the temporal duration of sleeping, which is said to exceed that of Peter's sleeping. And in examples like *eating more*, the comparative would apply to one of the verb's arguments, i.e. *more* refers to the quantity of the object (food) that is consumed. In sum, in examples such as (11)b-d, degree quantifiers measure and compare along a scale of quantity, while in (11)a they make use of a scale that corresponds to (the intensity of) a property.

A second type of observation is that other lexical categories also include expressions that seem to identify a scale in their lexical, conventional meaning, corresponding to a property that may hold of individuals to a higher or lower degree (of intensity), in a similar way to gradable adjectives. They may be said to be "intensively" gradable (cf. Bolinger 1972). Consider the following examples:

(12) a. a big idiot [English]
b. un gros con [French]
a big idiot
'a big idiot'
c. un mare nătărău. [Romanian]
a big idiot
'a big idiot'

The adjective *big* seems to contribute a (high) degree interpretation: *a big idiot* is 'a very idiotic person'. In other words, the relation between the adjective *big* and the noun it modifies seems to parallel the relation of a degree modifier (e.g. *very*) to an adjective – e.g. *very idiotic*. This shows that there are nouns which allow us to conceive of them as holding of an entity to varying degrees. In this they contrast with ordinary nouns, such as *person*, *lawyer* etc.; predications involving such nouns are typically felt to imply that the entity in question either is or is not identified by the noun. That is, someone is or is not a lawyer; "they may be a good lawyer or a bad one, but their being good does not make them more a lawyer, nor their being bad, less" (Bolinger 1972: 15).

A similar distinction is found in the verbal domain. Compare (11)d to (13) below. One may eat, sleep, dance etc. or not, but whether one eats or dances slow or fast, or much or little, is not reflected in degrees to which entities manifest the verbal property (cf. Bolinger 1972: 15). *Eat*, *sleep*, *dance* are non-gradable verbs, and expressions like *more* etc. only refer to the quantity consumed or the temporal duration of the activity. However, there are verbs which express processes or states that may hold of their subjects to various degrees. One can, for example, *like*, *love*, *appreciate* etc. something or someone to a higher or lower degree. Such verbs are gradable. For example, (13)a is interpreted as stating that the degree to which Peter likes chocolate exceeds the degree to which his brother likes chocolate. (13)b and (13)c similarly compare extents to which the properties expressed by the verbs (*appreciate*, *interest*) are manifested in entities.[13]

(13) a. Peter likes chocolate {more/ less} than his brother.

[13] Examples (13)b,c are from Doetjes (2008) and Sassoon (2007a), respectively.

b. John appreciated the comments less than he should.
c. Today's film interested Dan more than yesterday's film did.

In sum, these two facets of gradability may be summed up by saying that there are two types of scales with respect to which degree modifiers can be interpreted, namely the scale of quantity, as in (11)b-d, and the scale corresponding to (the intensity of) a property (or 'quality scale'), as in (11)a, (12) and (13). Focusing now on the nominal facts, (11)b,c and (12) suggest that gradability in the nominal domain becomes relevant at two different levels in the DP structure, in two different ways. That is, the two types of scales seem to be available in different layers of the structure to different types of expressions. When expressions such as *more*, which are used as degree modifiers in other contexts, combine with nouns, they appear high in the DP structure and only give rise to quantity readings not pure degree readings. Pure degree (intensity) interpretations in the nominal domain are realised by means of modification by (certain types of) adjectives, that are located lower in the DP structure (*big idiot*, *complete fool*, *great patience*, *amazing courage* etc.). This is illustrated in (14), which shows that the two types of expressions, namely degree quantifiers and "degree adjectives", can co-occur within the same DP and they do so in this specific order.

(14) a. more big idiots [English]
b. {plus/ trop} de grands cons [French]
more/ too.many of big idiots
'{more/ too many} big idiots'
c. atâția mari nătărăi [Romanian]
so.many big idiots
'so many big idiots'

Moreover, degree quantifiers like *more* have to appear at this higher structural level within the DP, they cannot appear lower in the DP structure. They only select mass and plural nouns, and cannot give rise to pure degree interpretations.

(15) a. *a more idiot [English]
b. *un {plus/ trop} idiot [French]
a more /too.much idiot
c. *un atât de nătărău [Romanian]
a so.much of idiot

This distinction in terms of structural position and the associated difference in interpretation is not found in the adjectival domain. The facts reviewed so far already raise certain questions. First of all, how can the cross-categorial distribution of (certain) degree modifiers be captured, while also taking into account the somewhat different interpretations they give rise to in the different contexts, namely degree of (intensity of) a property and (degree of) quantity, as illustrated in (11)a vs. (11)b,c above? And how to explain the fact that in the nominal domain they are actually restricted to a quantity scale? This is quite puzzling. Their exclusive

compatibility with plural and mass nouns suggests that they are sensitive to a certain semantic property of nouns, namely cumulative reference (cf. Doetjes 1997) or monotonicity as defined on the part structure of nouns (cf. Schwarzschild 2006), while this property does not condition gradability in the case of adjectives (see discussion in Doetjes 1997). Some suggestions in this connection will be made in the concluding chapter of this dissertation. A more basic question that arises is: what should "gradability" be used for in the nominal domain? Which nouns are gradable, and based on which criteria can they be categorized as such? This is the question that will in fact occupy us in the rest of this dissertation. It will already be addressed in section 2 of this chapter where the tests for gradability proposed in the literature will be presented. From that brief overview it will become apparent that these diagnostics are not unproblematic. In chapters 2-4, we will re-examine some of these environments in more detail and show that in fact they are not good tests for gradability and do not provide conclusive evidence in favour of the existence of gradable structure in nouns that would be (completely) parallel to what we know from the adjectival domain. Finally, the facts briefly above raise the question as to how gradability is to be represented in the nominal domain, semantically and syntactically, especially in view of the two types of interpretations found at different levels in the structure and realised by different means. What is the relation between degree of a property and quantity? Some suggestions in this respect will be made in the concluding chapter, where we discuss the consequences that the (negative) results of the investigation carried out in this dissertation have for the representation of gradability.

Similar issues arise in connection with the verbal domain: the locus and nature of gradability, the consequences the choices made with respect to the semantic representation of gradability will have on the syntactic structures assumed, the interaction with other semantic and syntactic components or layers of verbal structure etc. A significant amount of work has already been done in the verbal domain (see, among others: Abusch 1986, Dowty 1991, Doetjes 1997, Hay, Kennedy and Levin 1999, Vanden Wyngaerd 2001, Caudal and Nicolas 2005, Kennedy and Levin 2008, Rappaport-Hovav 2008, Rothstein 2008, Levin and Rappaport-Hovav 2010),[14] though still more research is needed to shed more light on gradability in this domain.

Indeed, for a full understanding of gradability, a systematic study of its manifestations across all categories is needed. This dissertation will take a step in this direction, by examining gradability in the nominal domain. The aim we start out with seems to be a rather simple one: we would like to know which expressions, if any, can be taken to be gradable in this domain. This is why, in the second part of this chapter, we will review the tests that have been used in the literature for diagnosing nominal gradability. As it turns out, these diagnostics raise a number of problematic issues which will provide the ground for the rest of this dissertation.

[14] In the verbal domain, a lot of focus has been on the semantics of degree achievements, which has received both degree-based (Hay, Kennedy, and Levin 1999, Kennedy and Levin 2008, Rappaport-Hovav 2008, Levin and Rappaport-Hovav 2010, Rothstein 2008) and degree-less analyses (Abusch 1986).

2 Identifying gradability in the nominal domain

The aim of this section is to delimit the domain of investigation to be carried out in this dissertation. In order to do so, it is necessary to identify the semantic and syntactic properties that can be used as diagnostics for gradability in the nominal domain and that could motivate (the linguistic relevance of) a distinction between gradable and non-gradable nouns. Several possible tests for nominal gradability have been proposed in the literature. These include the types of interpretations nouns receive when they are used in particular environments, such as *wh*-exclamatives (cf. Bolinger 1972, Milner 1978 a.o.) and with what have been argued to be degree operators, namely *such*, *quite* (cf. Bolinger 1972, Matushansky 2002b, Birner and Kaplan 2004 a.o.). Another type of test consists of the availability of certain types of adjectival modifiers (i.e. "degree adjectives") which can give rise to degree readings (cf. Bolinger 1972, Matushansky 2002b, Morzycki 2009). Finally, another diagnostic for gradability has been taken to be their distribution in particular syntactic structures, such as the *N of an N* construction (cf. Bolinger 1972, Milner 1978, Matushansky 2002c a.o.) and as nominal predicates with *seem* (cf. Bolinger 1972, Matushansky 2002b). In §2.1-§2.3 we will examine each of these tests in turn, showing how they have been used in the literature, as well as confronting them with new data. This is a necessary step especially since not all of these tests have always been applied to all of the same types of nouns in the different works that we will be referring to. For example, while Bolinger (1972) studies the distribution and interpretations of a large variety of English nouns in all these environments (though less in *N of an N* structures), Milner (1978) only concentrates on epithet nouns, including nouns like *idiot*, in the *N of an N* construction (also mentioning their behaviour in *wh*-exclamatives). Morzycki (2009) only looks at nouns like *idiot* and *eater* which can be modified by adjectives such as *big* in a degree sense. Matushansky (2002b) takes a cross-categorial perspective on gradability ("scalarity", in her terminology), but she only briefly mentions diagnostics such as interpretation and distribution in *wh*-exclamatives, with the degree operators *such* and *quite*, and degree adjectives like *utter*, while trying to account for the behaviour of *seem*.

Closer scrutiny reveals that these tests yield diverging results, which raises questions as to the gradable/ non-gradable status of certain nouns, and/or to the reliability of some of the tests, as will be discussed in more detail in §2.4. The discussion suggests that a more careful and systematic investigation is needed in order to sort out cases of genuine gradability from those of only apparent gradability, and the genuine tests for gradability from those that are better treated in a different way. In the coming chapters, therefore, we will re-examine these tests in more detail and propose, in fact, that they should be analysed in quite radically different ways.

This section, therefore, is intended to set the scene for the issues that will be dealt with in this dissertation, by critically evaluating the received view on (the diagnostics for) gradable nouns.

2.1 *Wh*-exclamatives, *such*, *quite* and *more of an N*

This sub-section will examine the first type of environment which has been claimed to point to a linguistic distinction between gradable nouns and ordinary, non-gradable common nouns. This includes *wh*-exclamatives, structures with *such* and *quite* containing unmodified nouns, as well as structures of the type *much/ more of an N*. These have been argued to give rise to different types of interpretations depending on the type of noun used. Consequently, the different interpretations found in the context of these elements, which have generally been analysed as degree operators, can be used to identify the type of noun, namely gradable vs. non-gradable. In addition, in the case of *such*, this difference in interpretation also correlates with a difference in distribution: it has been claimed that only when such structures contain gradable nouns can they be used as exclamatives and with result clauses.

2.1.1 *Wh*-exclamatives

It has been argued that nominal *wh*-exclamatives (i.e. those containing unmodified nouns) receive different types of interpretations depending on the type of noun used (Bolinger 1972, Milner 1978, Ruwet 1982, Matushansky 2002b etc.); this distinction in interpretation can thus be used as a test to identify the type of noun, namely gradable or non-gradable.

Consider, to start with, the following example:

(16) What an idiot John is!

In this example, the exclamation is about the degree to which John has the property denoted by the nouns *idiot*. The sentence is equivalent to one containing the corresponding adjective: *how idiotic John is!* In other words, the *wh*-exclamative is interpreted as intensifying some gradable property inherent to the lexical meaning of the noun, namely idiocy. Bolinger (1972) calls this the "intensifying" use of *what*; we will henceforth refer to it as the "internal degree" interpretation. Now compare this to the following example:

(17) What a guy John is!

Here, John is simply identified as a particular type of individual, as characterized by some external property which is left implicit. Being a guy is assumed, and the surprise is directed at this implicit quality, external to the fact of being a guy, such as being extraordinarily or surprisingly reckless, inventive, amusing etc. Bolinger (1972) calls this the "identifying" use of *what*. This label is somewhat misleading though, since with *wh*-exclamatives there is always a sense of intensification. The difference between cases like (16) and (17) lies rather in whether the property which triggers the exclamation is contained in the meaning of the noun itself, or whether it is external to the lexical meaning of the noun and is to be somehow inferred from

the context. For this reason, we will use the term "external (degree)" interpretation to refer to the sort of interpretation found in examples like (17).

Bolinger (1972) notes that what may have an external reading in (16) too: the sentence could be uttered when what is unexpected is not the high degree of idiocy, but some other property someone who is idiotic may be distinguished by – e.g. he is a very friendly idiot. Nevertheless, this is not an easily available interpretation (cf. also Matushansky 2002b); the degree interpretation is clearly the default one. Crucially, however, the reverse is not found: the internal degree interpretation is simply not available in (17).

(18) Therefore, while the external interpretation is available to practically any noun, of any type, [+/-mass], [+/-human], concrete or abstract, the internal degree interpretation is restricted to a subset of common nouns. Intuitively, these are nouns that include a gradable property in their lexical, conventional meaning which can be targeted by *what*. These are then assumed to be gradable nouns. The nouns which do not allow the internal degree interpretation and can only give rise to an external interpretation in *wh*-exclamatives, such as (17) above, are taken to be non-gradable. They include no inherent gradable property in their meaning which can be intensified by *what*; the entity under discussion is simply identified as a particular type of N, and the evaluation is always made with respect to some external property that has to be recovered from the context.[15] In sum, this test for gradability consists in the availability of the internal degree interpretation in *wh*-exclamatives. This is what would identify nouns as gradable.

The example in (16) has already illustrated a sub-class of such nouns, namely those which categorize individuals via a salient gradable property, and which are often derived from or otherwise related to gradable adjectives. Other examples include *fool*, *genius*, *(jazz-)enthusiast* etc., as well as certain nouns derived from other gradable nouns (e.g. *blunderer*) or from gradable or non-gradable activity verbs by means of the agentive suffix *–er* (e.g. *liar*, *eater* etc.):

(19) a. What a blunderer!
b. What a liar John is!
c. What {an eater/ a drinker} John is!

(19)a expresses surprise at what serious, embarrassing mistakes or how many such mistakes someone makes; (19)b exclaims at how much someone lies or what outrageous lies they tend to tell; and (19)c at how much someone eats or drinks. So some inherent gradable meaning seems to be targeted with these nouns too, with the difference that, in cases like (19)c especially, it is a notion of quantity that seems to be built into the meaning of the nouns, rather than a gradable property such as idiocy. Another subclass of nouns that qualify as gradable according to this test consists of mass nouns such as *nonsense*, *misbehaviour*, *abundance* (cf. Bolinger 1972), and the whole series of abstract mass nouns naming properties or qualities, such as *wisdom*, *courage*, *dedication*, *patience* etc. (cf. Van de Velde 1996, Tovena

[15] The sense of the evaluation is not predetermined; it may be either positive or negative, depending on context, and usually indicated by the intonation. So (17) above for example may be interpreted as 'what a *great* guy' or 'what an *awful* guy'.

2001). The examples below get an internal degree interpretation, where what is exclaimed at is the high degree of nonsensicality and courage, respectively:

(20) a. What nonsense he's talking!
b. What courage they showed!

In addition to these two classes of nouns, there is another large and more heterogeneous class of nouns that have been claimed to give rise to internal degree interpretations; we include here (mostly count) nouns denoting (abstract or concrete) objects, such as *smell*, *prize*, *deal*, *bargain*, *effort*, *scowl*, *difficulties*; *mistake*, *failure*, *success*, *blunder*, *masterpiece*, *blaze*, *inconvenience*, *extremes*, *trivialities*, *harangue*, *flare-up*, *appetite*; *stink*, *fragrance*, *boon*, *gyp*; *disaster*, *chaos*, *impertinence*, *mess* etc. (cf. Bolinger 1972):[16]

(21) a. What a {deal/ bargain} we got!
b. What efforts they had to make!
c. What a mistake he made!
d. What a failure their enterprise was!

In sum, all the nouns illustrated in (16), (19)-(21) would qualify as gradable by this test since they can receive an internal degree interpretation, though they may differ somewhat with respect to how salient or easily accessible the relevant interpretation is.

An interesting class of nouns is that of nouns denoting professions. Consider the following examples:

(22) What a {doctor/ attorney/ monarch/ teacher/ informant} John is!

These examples all give rise to an external interpretation. What is interesting to note is that the most prominent interpretation is one in which what is being exclaimed at is the quality with which John performs the respective jobs, i.e. he is good or bad as a doctor etc. Unlike other non-gradable nouns, a profession noun makes easily available what we may call the 'function' dimension along which the individual can be evaluated. Interestingly, informants in fact find examples of profession nouns in *wh*-exclamatives significantly easier to interpret (in the absence of any other overt modifiers) than other non-gradable nouns such as *person*, *house*, *dress* etc.

Profession nouns have also been claimed to give rise to other types of interpretations in *wh*-exclamatives. Bolinger (1972:72-73) points out that in an example like (23) below the exclamation may refer to the essence of being a lawyer – he is the perfect example, the embodiment of a lawyer; he is the perfect lawyer. In other words, it receives what may be called a prototypical interpretation.

(23) What a lawyer John is!

[16] Both interpretations may be available in fact, but nouns may differ as to how salient or easily accessible either one of these interpretations is – see Bolinger (1972) for extensive discussion of the data.

It seems that unlike in the usual external interpretation, in this prototypical interpretation the property targeted by the *wh*-exclamative can be retrieved without the help of context.[17] However, it is not completely clear that this should be treated as a different sort of interpretation. Given that in the usual cases the interpretation can be paraphrased by means of adjectives such as *extraordinary*, *outstanding* etc., and that with profession nouns it is the quality as an N that is being evaluated, it is not unlikely that this may come close to understanding that *x* is a 'perfect N'. The picture is also complicated by the existence of yet another type of interpretation. Consider the following examples:

(24) What a {lawyer/ prince/ scholar/ informer/ clown} John is!

The nouns in these examples may be interpreted metaphorically or figuratively. The exclamation applies to the subject's having properties stereotypically associated with being N, for example being a litigious person in the case of *lawyer*, a nice, well-mannered fellow for *prince*, a very knowledgeable person for *scholar*, someone who tells on people for *informer*, and a funny fellow for *clown* (cf. Bolinger 1972, see also Matushansky 2002b). John is not an actual lawyer, prince, scholar, informer or clown; and the examples may be paraphrased by *–like* adjectives: 'John is lawyer-like' etc. In this respect, this type of interpretation differs from the interpretations discussed in relation to examples (22) and (23) above, where John has the respective profession. In other words, there seems to be a difference in truth-conditions between them. Note also that not all profession nouns can have such uses – cp. e.g (22) to (24). The availability of such interpretations depends not only on lexical or semantic factors, but also on pragmatic ones; it depends on speakers' world knowledge,[18] and as such it is expected that they would be encountered more easily with nouns that refer to professions that are more readily associated with stereotypical images due to clear social status or to being associated with one particularly clear function (e.g. making people laugh in the case of clowns).[19] However, nouns which refer to the same or very similar professions may behave differently with respect to whether such a figurative interpretation is (easily) available, as witnessed by pairs such as *lawyer* vs. *attorney*, *informer* vs. *informant* etc.[20], where the former but not the latter have such uses.

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[17] Bolinger (1972) also notes that the same type of interpretation is encountered in (i) where the noun is prosodically stretched:

(i) That man's not just a lawyer, he is a **l a w y e r** !

This is particularly interesting since the same prosodic treatment is typically accorded to gradable nouns such as *idiot, fool* etc., while a non-gradable noun like *lad* would not be prosodically stretched in the predicate:

(ii) a. *He's a **l a d** !
b. He's a **f o o l** !

[18] Consequently, we also expect the profession nouns that have such uses to differ to some extent from one language to another. In Romanian but not in English, for example, *engineer* may be used figuratively to indicate that someone does not have a very imaginative or flexible thinking.

[19] We will return to a more detailed discussion of stereotypical interpretations in chapter 3.

[20] It seems that the nouns in these pairs which allow the relevant interpretation are those that are more general terms, possibly hyperonyms in the respective semantic field, while those that do not are more specific or specialized either in terms of their meaning or of the registers in which they are used (e.g. *lawyer* vs. *attorney* or *sollicitor*; *scholar* or *artist* vs. *teacher* or *painter* etc.); sometimes this difference

Such metaphorical or figurative interpretations, whereby an individual is attributed properties stereotypically associated with being N, can also be found with other basically non-gradable nouns, whether [+human] (e.g. *man*, *boy*, *child*, *baby* etc.) or [-human] (e.g. *hut*, *palace*, *pigsty* etc.). Nouns are normally used in this way to convey some kind of evaluation, whether positive or negative, and are thus close to epithets.[21]

(25) a. What a {man/ baby} John is!
b. What a {palace/ pigsty} this place is!

To conclude, this section has shown how the interpretations obtained in *wh*-exclamatives may be used as a test for gradability and which nouns would qualify as gradable by this test. In addition to nouns that quite straightforwardly encode a gradable property in their lexical meaning, such as *idiot*, *jazz-enthusiast*, *courage*, *blunder*, *mess* etc., another class that seems to give rise to the relevant interpretation is that of nouns that receive figurative stereotypical interpretations which seem to correlate with some sort of evaluation (e.g. *pigsty* etc.), i.e. the case of (quasi-)epithet uses. In chapter 3 we will return to a discussion of *wh*-exclamatives and suggest that they involve a mechanism which arguably applies in the same way to both gradable and non gradable nouns. As for figurative stereotypical interpretations and (quasi-)epithetic uses of nouns, questions will arise concerning their status when other tests are considered too, namely *such*, and especially *N of an N*. The issue will be taken up in the re-examination of *N of an N* in chapter 2 and in the analysis of *such* in chapter 3, where it will be argued that these are not gradable meanings.

2.1.2 *Such*

Another possible test for gradability consists of the possible co-occurrence, under a particular interpretation, with *such*. Similarly to *wh*-exclamatives, it has been observed that with *such* there is a difference in available interpretations depending on the type of noun used. In fact, based on this observation, it has been proposed in the literature that there is a distinction between a kind or "identifying" *such* and a "degree" or "intensifying" *such* (Bolinger 1972, Carlson 1977, Siegel 1994, Landman and Morzycki 2003, Wood 2002, Landman 2006 a.o.).[22]

correlates with a difference in the morphological make-up of the nouns (e.g. *informer* vs. *informant*). The latter aspect will not be investigated here; for more discussion of (the availability of) the type of interpretation found in examples like (24) above, see chapter 2 (§3.3.1.2, §3.3.2.2). chapter 3 (§3.4.1), chapter 4 (§2.1).

[21] Epithets are noun phrases used to characterize the nature of an individual (e.g. *bastard*, *sissy*, *jerk* etc.; often based on stereotyped metaphors: *trash*, *wreck*, *angel*, *jewel*, *mouse*, *pig*, *dog* etc.) and contribute mainly affective meaning, which is typically negative: contempt, anger, irony etc. (cf. Bolinger 1972, see also Milner 1978, Ruwet 1982, and chapter 2 for a discussion of epithets). As such, when they are used in exclamatives, there is no ambiguity as to the orientation of the evaluation (cf. Milner 1978).

[22] Bolinger (1972) actually points out that while "identifier" *such* identifies a particular (type of) individual, "intensifier" *such* also identifies, though not with a particular individual, but with a particular degree, and the difference can be assigned to the semantic component of the noun that is determined by *such*: "individuality" with non-gradable nouns, "degree" of some quality with gradable nouns.

Consider the following example taken from Bolinger (1972):

(26) Such a person always frightens me.

Here, *such* is used to identify a particular type of individual based on (or, more precisely, by co-reference with) some external property that is to be recovered from the linguistic or extra-linguistic context, i.e. anaphorically or deictically. This is the "identifying" use of *such*, or the "kind" *such*. In (27) below, on the other hand, a different interpretation is available:

(27) We cannot hire such an idiot.

This example can be interpreted in terms of the high degree to which the property denoted by the noun, namely idiocy, holds of the individual in question. *Such an idiot* is equivalent to a structure containing the corresponding adjective: 'someone who is *so idiotic*'. This is the "intensifying" use or "degree" interpretation of *such*, which parallels the interpretation of *what* in (16) in §2.1.1.

Just as in the case of *wh*-exclamatives, the availability of a degree interpretation has been taken as a test to identify gradable nouns. As noted above for *wh*-exclamatives, a kind interpretation may be available with gradable nouns too, as in (27), though maybe not as prominently. In other words, kind *such* can be used with any noun. But, crucially, there are nouns which are only compatible with kind *such* and not with degree *such*; for example, no degree interpretation is available with nouns like *person* in (26). The nouns that do not allow the degree interpretation and can only give rise to a kind interpretation are assumed to be non-gradable nouns.

Unlike *wh*-exclamatives, where there is always some sense of intensification, even if in relation to an external property, kind *such* receives a completely neutral kind interpretation ('a person of that kind') without any additional tinges of meaning. Under this interpretation, *such* NPs cannot in fact be used in exclamatives, while degree *such* can. They also resist the use of result clauses, again in contrast with degree *such*, and combine instead with *as*-clauses. In other words, the difference in interpretation correlates with an additional difference in distribution. The contrast is illustrated below:

(28) a. *He is such a person that I can't trust him. [kind]
b. *He's such a person!

(29) a. He is such a fool that I can't trust him. [degree]
b. He is such a fool!

The nouns which were seen to allow the internal degree interpretation in *wh*-exclamatives can also co-occur with degree *such*, i.e. with result clauses and in exclamatives, on a degree interpretation of *such*. These are [+human] gradable nouns like *idiot*, *fool*, *genius*, *enthusiast*, *liar*, *eater* etc.,[23] and [-human] nouns, including

[23] Bolinger also notes the following examples of compound agentive nouns that can be intensified in the same way:

mass and count nouns – e.g. *nonsense*; *courage*, *patience* etc.; *smell*, *prize*, *deal*, *bargain*, *effort* etc.; *mistake*, *failure*, *success*, *blunder*, *masterpiece*, *blaze*, *extremes*, *trivialities*, *appetite* etc.; *stink*, *fragrance*, *boon*, *gyp*; *disaster*, *chaos*, *mess* etc. Some examples are given below, which may be compared with examples (19)-(21) in the previous sub-section.[24]

(30) a. We can't afford to hire such an eater to wait on customers; he wants to sample everything in the candy counter.
b. He is such a liar!

(31) a. He was talking such nonsense that everybody laughed at him.
b. He showed such courage in battle that he was awarded the highest distinction.

(32) a. He spent such a fortune on it that he went bankrupt.
b. He committed such a blunder that the department lost prestige.
c. There was such a {stink/ mess} in the room!

By contrast, the nouns that came out as non-gradable according to the previous test cannot be used with with degree *such* in this way, as illustrated in (33), but can only co-occur with the anaphoric or deictic kind use of *such*, as in (34). These are [+human] or [-human], count or mass, concrete or abstract, nouns, such as *individual*, *person*, *guy*, *lad* etc., *house*, *dwelling*; *dress*, *telescope*; *scent*, *award*, *purchase*, *sale*, *transaction*, *attempt*(*s*), *expression*, *situation* etc., *wine* etc.; *information*; *behaviour* etc..

(33) a. *It is such a telescope! (that everyone would want to have it)
b. *They made such attempts!

(34) a. We need such a telescope (as they have at the other station).
b. They have been trying to improve the education system by introducing new reforms for years now, but all such attempts have failed so far.

Nouns referring to professions, such as *attorney*, *doctor*, *farmer*, *postman*, *monarch*, *teacher*, *informant* etc., are also incompatible with degree *such*:

(35) *He is such a postman!

However, some examples are found, such as the ones in (36). Matushansky (2002b) claims that (36)a is interpreted as 'such a *typical* linguist', a paraphrase which is similar to the prototypical interpretation identified above for *wh*-exclamatives.

(i) a. He is such a woman-chaser.
b. He is such a weaver of lies.

[24] Examples (30)a, (31)a, (32), and (33)b are taken from Bolinger (1972).

(36) a. He's such a linguist! (he'd ask for grammaticality judgments even while the plane he's on is being hijacked!)
b. But I'm such a linguist that I'd start subconsciously mimicking the sounds they'd make.

In the previous sub-section some doubts were expressed as to whether this is the proper way of understanding such examples, or whether this interpretation can be reduced to one of the other types of interpretations identified, namely the external interpretation of *wh*-exclamatives (which, in the case of profession nouns is most saliently restricted to an evaluation of the quality which which a given individual performs the respective job or function) or the figurative, stereotypical interpretation. We are now in a position to provide an answer to this question in relation to examples like (36). The former interpretation basically rests on the possibility of retrieving and interpreting an implicit external property. This strategy is not available in structures with *such*, as shown by the ungrammaticality of non-gradable nouns in the specific contexts (e.g. (28), (33), (35)). Otherwise, i.e. if the option to fill in a contextual property were available, they should be acceptable, just as they are in *wh*-exclamatives, and only receive a different interpretation. This suggests that this is not how the interpretation found in (36) is obtained. The latter sort of interpretation, however, is found in the typical degree *such* contexts. That is, if a noun can be construed in a figurative sense, in which it would describe someone who has properties stereotypically associated with being N, then it becomes compatible with degree *such*, i.e. with result clauses and exclamations. Just as noted in connection with *wh*-exclamatives, such metaphorical, stereotypical interpretations can be obtained with (certain) profession nouns, such as *prince*, *lawyer*, *scholar*, *informer*, *clown* etc., but also with non-profession nouns, whether [+human] or [-human], such as *man*, *baby*, *child* etc., *hut*, *palace*, *mansion*; *hovel*, *pigsty* etc., including nouns which are typically used as epithets. These are all illustrated in (37)-(40).

(37) He is such a clown!

(38) Don't be such a baby!

(39) a. Their new house is such a palace!
b. Those '50s Cadillacs were such boats! (you couldn't ride in them for a few minutes without getting sick!)

(40) a. She is such an angel!
b. He is such a {lamebrain/ bastard}!

We would like to propose, therefore, that cases like *He's such a linguist!*, which have been claimed to have a prototypical interpretation, in fact share the same sort of interpretation exhibited by examples like (37)-(40), namely one which involves stereotypical properties associated with N. In the case of *linguist*, these could be showing extraordinary sensitivity to or interest in language, including sounds,

grammar etc. In fact, if one allowed for prototypical interpretations, it would be hard to explain why not just any noun that denotes (a set of) objects which come with prototypes, or prototypical examples, but which lack stereotypical associations, (e.g. *bird* etc.), can be used with degree *such*:

(41) #This robin is such a bird!

We would like to suggest that the apparent difference in interpretation between examples like (36) and (37)-(40) stems from an independent difference concerning the individuals they are predicated of. If the individual referred to by the subject DP is already an actual N, then predicating *such an N* of this individual will result in what looks like a prototypical interpretation. This is because the sentence ends up being about someone who is an actual N, i.e. has the core, definitional properties of N (e.g. the respective job in the case of *linguist*), as well as having stereotypical, non-essential properties usually associated with being an N.[25] It is this conspiracy of factors that makes the respective individual look like the perfect exemplar of the category denoted by the N, i.e. the prototypical N. In case the individual denoted by the subject DP is not actually an N, however, the sentence will only contain a predicate that attributes stereotypical, non-essential properties of N to that individual. This is the figurative use of the nouns in (37)-(40) (and (24)-(25) in §2.1.1). While a figurative use implies a stereotypical interpretation, the reverse does not hold: a stereotypical interpretation does not necessarily imply a figurative use. Nothing excludes that in the domain covered by the stereotypical interpretation of a noun N there will also be individuals that are actual Ns, as long as they exhibit the required type of properties too, i.e. stereotypical properties associated with the kind.

Judging by the distribution and interpretation in *wh*-exclamatives and with degree *such*, it can be observed that nouns which can be viewed as encoding a gradable property in their meaning (cf. examples (27), (29)-(32)) and nouns with a stereotypical interpretation pattern together. In fact, Bolinger (1972) and Matushansky (2002b) argue that the latter are gradable (uses of) nouns. If these stereotypical interpretations are to be regarded as shifts in meaning, then one way to capture this is to say that they arise as the result of scalarity coercion triggered by the degree operator *such*, as proposed by Matushansky 2002b, for example. What would happen in such cases is the following: attempting to combine a non-gradable noun with a degree modifier results in a type mismatch; the repair strategy is this type-shifting operation, which changes the meaning of the non-gradable nouns so that they can be interpreted as gradable. In other words, basically non-gradable nouns are coerced into a gradable meaning. In Matushansky's view, the meaning shift that is typical of scalarity coercion, whether in the nominal domain or in the adjectival domain (cf. *He's so Italian*), corresponds to 'having many of the *typical* properties associated with' being N or A, where "the notion of a prototype or a stereotype comes into play".

[25] Note that we will not have much to say about prototypes in this dissertation, hence we will not elaborate any more on the exact sense in which this notion is used in e.g. prototype theory – cf. Kamp and Partee (1995).

The discussion above shows that this cannot be (completely) correct, since, in fact, an interpretation in terms of prototypical properties cannot be obtained. In chapter 3, we will discuss this class of interpretations in more detail and show that stereotypical meanings are in fact not gradable, in the sense that the domain of these nouns is not ordered (i.e. the individuals in the domain are not ordered by degrees of a property). Moreover, it will be shown that such interpretations are also found in the absence of *such*, which argues against an analysis in terms of scalarity coercion, which views these meanings as 'created' due to the use of the degree operator. It will in fact be argued there, more generally, that *such* itself is not a true degree operator.

2.1.3 *Quite*

A third test that has been used to identify gradable nouns is their possible occurrence with *quite* – once again under a particular interpretation. Similarly to *wh*-exclamatives, *quite* can be used with a variety of nouns, but the interpretation differs depending on the type of noun it modifies (Bolinger 1972, Matushansky 2002b, Birner and Kaplan 2004), and the availability of a degree interpretation has been taken to identify a noun as gradable in this context too.

The examples below show that nouns which came out as gradable according to the tests considered previously can also be modified by *quite* (some of the examples are taken from Bolinger 1972, Matushansky 2002b, Birner and Kaplan 2004). In all of these examples, *quite* has been claimed to be interpreted as indicating a high degree to which the property denoted by the noun holds.[26]

(42) a. Adam is quite a genius.
b. John is quite a fool.
c. He is quite a giant.
d. He's quite a drinker.

(43) a. It was quite a flop.
b. Quite a temper he's got!
c. They left quite a mess behind.
d. His new book was quite a success.

Quite is generally assumed to be a degree modifier which denotes a high value on a scale[27]. When it modifies gradable nouns, it can be interpreted with respect to the

[26] It is not always clear where and how the line between gradable and non-gradable nouns is drawn. Matushansky (2002b) claims that the interpretation of the *quite an N* construction differs depending on the inherent gradability of the noun modified, but subsequently adds that it is interpreted as indicating a high degree to which the predicate holds "if the predicate noun expresses personal evaluation". If nouns expressing personal evaluation are assumed to be scalar, one may wonder whether expressing personal evaluation and being gradable are one and the same thing, and/ or what the environments she examines actually test for. The issue of the blurry borders between the notions of evaluation and gradability will come up again in the course of this investigation – see chapter 2 for discussion in the context of *N of an N* constructions.

[27] It seems, however, that the particular intonation and context may influence the exact interpretation of *quite*. Thus, in examples like (i), it may be interpreted, depending on intonation, either as indicating high

scale identified in their conventional meaning (cf. Bolinger 1972, Matushansky 2002b, Birner and Kaplan 2004).

Quite, however, can also modify ordinary, non-gradable nouns, as illustrated in (44). Such examples have been argued to receive a different interpretation. They do not convey the extent to which the referent is an N; instead, the interpretation can be paraphrased as 'a remarkable N' (cf. Bolinger 1972, Matushansky 2002b, Birner and Kaplan 2004).[28]

(44) a. That's quite a shirt.
b. That (building/ house) is quite a building.
c. He's quite a guy.
d. That's quite a car!

The objects referred to in (44) are remarkable, exceptional, or noteworthy in some way. Birner and Kaplan (2004) propose that, in such cases, *quite* is interpreted with respect to an external, contextually salient scale; as Ns, the objects referred to in such examples rank high on some (unspecified) scale. In this respect, they resemble (the external interpretation of) *wh*-exclamatives. The shirt, for instance, might be one that is particularly ornate, expensive, tacky, old etc. (Birner and Kaplan 2004:93). Similarly, the object referred to in (44)d must be an impressive car; more often than not, it would be for some incredible design or technical feature.[29] In sum, the sentences assert that the objects referred to somehow stand out among cars due to some feature they have, or their quality, as shirts/ buildings/ guys/ cars.

Consider now the following examples containing profession nouns:[30]

(45) a. William is quite a doctor – last time he performed a surgery, he operated on four patients at once!
b. Martin is quite a linguist.

As Matushansky (2002b) puts it, (45)a "does not mean that William is a doctor to a high degree whatever that might mean, but rather that he is an exceptional doctor". (45)b is also interpreted in terms of Martin being an excellent linguist. For the sentence to be felicitous, he has to have published an impressive number of papers, or sacrificed his life in the field, or done something else that is outstanding. Therefore, such examples seem to involve an interpretation like 'remarkable/ impressive (as an) N'. As also seen in the case of *wh*-exclamatives, with nouns

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degree (i.e. intensifying) or low degree (i.e. attenuating the intensity of a gradable property).
(i) He is quite {an idiot/ a genius}.
In addition, an example like (ii) [see (44)d] may be used to convey either a positive or a negative attitude of the speaker:
(ii) That's quite a car you've got there.

[28] Examples (44)a,b are from Birner and Kaplan (2004) and Bolinger (1972), respectively.

[29] But it could also look ridiculous, for a car – maybe it is as high as a bus, or it is tiny and very slow and some people would be inclined to even call it a car. It would then be outstanding in a reversed sense (cf. fn. 27 concerning the possible positive or negative interpretation, depending on the context, and as indicated by the intonation). This is probably best treated as a case of irony where the speaker implies the opposite of what s/he says.

[30] Example (45)a is from Matushansky (2002b).

denoting professions the salient dimension which is picked by default is the quality with which the individual in question performs the respective job, function etc. In fact, speakers report that a sentence like (45)b would not be felicitous if Martin were remarkable in some respect totally unrelated to being a linguist, for example if he were a very eccentric person (i.e. 'a linguist and an eccentric person').[31]

To sum up, the nouns that come out as gradable according to this test, namely those that give rise to a degree interpretation with *quite*, are the same as those identified by the *wh*-exclamative and *such* tests. Differently from the previous tests, however, nouns used with figurative, stereotypical interpretations are not always easily allowed, though not completely excluded either. In chapter 3, we will return to a discussion of *quite*, and suggest extending the interpretation of *quite* in terms of evaluating an individual as being 'remarkable as an N' (i.e. the sort of interpretation that has been associated with its occurrence with non-gradable nouns) to all cases.

2.1.4 *Much/ more of an N*

Another environment which may bring out a distinction between gradable and non-gradable nouns is what we will call predicative partitive structures. These are structures which tend to appear in predicate position or in positions where a predicative, i.e. property, (re-)interpretation is possible. They consist of a quantity expression (e.g. *much*)[32] and the preposition *of*, so they appear to have the structure of a (pseudo-)partitive. But unlike ordinary (pseudo-)partitives, they combine with an indefinite singular NP. An example is given below:

(46) He's more of an idiot than I thought.

Although these structures have not received much attention in the literature (but see Bolinger 1972, Sassoon 2007a), they are interesting they enable the use of expressions like *much*, *little*, *more*, *less* etc. with nouns on a non-quantity interpretation, which is the interpretation they usually get in the nominal domain: these structures seem to quantify over properties rather than measuring the size of the usual sets of entities in terms of quantity. This makes them more similar to degree modifiers, therefore, and raises the question whether this is indeed how they should be treated. This issue will be taken up in chapters 3 and 5. In what follows, we will briefly examine the distribution and interpretation of these expressions relative to various classes of nouns with a view to seeing whether this can be used as a test for gradability.

Unlike degree *such*, and similarly to *wh*-exclamatives (and *quite*), predicative partitive structures may be used with a variety of nouns. The meaning has been

[31] This parallels the subsective interpretation of adjectives in cases like *a beautiful dancer*, i.e. when it is interpreted as 'beautiful as a dancer', as opposed to the intersective interpretation (i.e. 'beautiful and a dancer').

[32] The first slot of the structure can be occupied not only by *much*, but also by *little*, *something*, or by such elements modified by degree words like *too*, *how*, *enough*, *very*, *terribly*, comparative forms etc. As Bolinger (1972) points out, this structure enables the incorporation of degree words that are not otherwise used as (degree) modifiers of nouns.

argued to differ along similar lines, depending on the type of noun, namely gradable or not (e.g. Bolinger 1972), so this is what makes the basis of this potential test for gradability.

The following examples (taken from Bolinger 1972) show that nouns that have come out as gradable according to the previous tests can be used in these structures:

(47) a. He's more of a fool than I thought.
b. She's too much of a blunderer for me to feel comfortable with her.
c. He was as much of a liar as all the other church founders.
d. He's {somewhat/ something} of a nitwit, don't you think?

(48) a. How much of an adventure was it?
b. He's less of a burden than it was feared he might be.
c. It was so much of a failure that he decided never to try again.
d. It's too much of a nuisance.

The interpretation of such examples has been argued to be in terms of the degree to which the property denoted by the NP (e.g. foolishness, shock etc.) holds of a given individual. This is similar to the interpretation obtained when a (corresponding) adjective is modified by a degree word (e.g. 'more foolish', 'how adventurous', 'that shocking', 'less burdensome', 'too annoying' etc.) or when a degree adjective modifies the gradable noun (e.g. 'a bigger/ worse fool' etc.). (cf. Bolinger 1972)

The examples below contain nouns that qualify as non-gradable according to the previous tests:[33]

(49) a. It isn't much of a telescope.
b. The BMW is more of a car than the Smart.

(50) a. How much of a doctor is he?
b. Martin is more of a linguist than anyone I know.

The interpretation of these examples has been argued to be different from (47)-(48). According to Bolinger (1972), (49)a can be paraphrased as 'for something called a telescope, it hardly deserves the name'. He also notes that in (50)a, for example, the interpretation cannot be paraphrased in terms of a corresponding adjective modified by a degree word, e.g. '*how medical is he?', as in (47)-(48) above. The examples in (49)-(50) can, in fact, be understood as saying something about the appropriateness of applying the description expressed by the noun to the individual in question, in virtue of the individual exhibiting the qualities or attributes that typically go to make a telescope, a car, a doctor, or a linguist (as Bolinger himself suggests in connection with example (50)a), or meeting the requirements for being called a telescope, a car, a doctor, a linguist.[34,35]

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[33] Examples (49)a and (50)a are from Bolinger (1972).

[34] These include, for example, better quality – not unexpectedly, especially for the nouns denoting professions (similar effects have been seen in *wh*-exclamatives and with *quite*). Better quality also seems to contribute to a car coming closer to the idea one might have of a typical, or "real" car.

Predicative partitive structures therefore seem to quantify over the set of all and any properties that may be associated with a noun. This includes prototypical and stereotypical properties. The former case is illustrated in (51), which asserts that the robin is more appropriately called *a bird* than a penguin, in virtue of it having more of the properties prototypically associated with the kind *bird* than the penguin, i.e. approaching the prototype more than the penguin. In this they differ from *such*, for example, which does not allow for prototypical interpretations:

(51) The robin is more of a bird than the penguin.

(52) #This robin is such a bird! [=(41)]

The latter case is illustrated in (53), which shows that these structures are also easily used with nouns under a metaphorical, figurative interpretation.[36] In all these examples, what counts for the appropriateness of being called an N is properties stereotypically associated with being a child, a boy, a palace, a boat, though the individuals in question are not actual children, boys, palaces, or boats.

(53) a. Marlene is still terribly much of a child.
b. How much of a pigsty is your room?
c. The old Cadillac that my grandpa owned was more of a boat than my dad's old Lincoln Continental.

In sum, predicative partitive structures have been argued to be interpreted differently depending on the type of noun, and as such to identify gradable nouns. The type of interpretation seen in (47)-(48) seems to be about the degree to which the property encoded in the lexical meaning of the nouns holds. Take *idiot*, for example; idiots are individuals characterized by idiocy, which is, intuitively, a gradable property, given that it may be manifested to differing degrees. Thus, if someone is characterized by more idiocy, s/he will be *more of an idiot*, and the other way round. This degree interpretation seems to be restricted to nouns that also came out as gradable according to other tests, and not available to other (non-gradable) nouns. With the latter types of nouns, the interpretation is rather in terms of the appropriateness of calling the individual in question an N. It has been shown in this section that any properties associated with the noun, including stereotypical ones (often associated with figurative uses) as well as prototypical ones, count for this evaluation. As such, these structures have a very wide distribution, much wider than

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Note also that such nouns cannot be used with degree *such* (unless they can be assigned a stereotypical interpretation), as illustrated by the contrast in (i) below:
(i) a. *He is such a lawyer that I know he will win the case.
b. He is enough of a lawyer to win the case.
b'. He was too much of a lawyer not to be able to win that case. (Bolinger 1972)

[35] This makes the interpretation of these structures similar to metalinguistic comparison, where what is compared is not the extent to which two individuals satisfy a certain property, but the appropriateness of applying one or the other description to an individual, as illustrated in (i):
(i) My problems are more legal than financial.
See chapters 3 and 5 for more discussion of predicative partitive structures.

[36] Examples (53)a,b are from Bolinger (1972).

what has been seen with *such*, *quite*, as well as degree adjectives, which will be considered in the next sub-section. This makes this potential test for gradability less reliable – less of a clear indication of the gradability of nouns. These structures will be re-examined in chapter 3 (along with *wh*-exclamatives and *quite*-structures), as well as in the concluding chapter where we discuss the consequences for the representation of gradability.

2.2 Degree adjectives

Another phenomenon which has been argued to be restricted to the class of gradable nouns, and which can, therefore, be used to identify such nouns is modification by certain adjectives with a degree interpretation. To start with, consider the following examples:

(54) a. a big idiot
b. a terrible braggart
c. a complete idiot

In these examples, the adjectives contribute a (high) degree interpretation. For example, *a big idiot* is 'a very idiotic person'. In other words, the relation between the adjective and the noun it modifies parallels the relation between a degree modifier (e.g. *very*, *terribly* etc.) and a gradable adjective (e.g. *idiotic* etc.). This reading differs from the regular use of the adjectives illustrated below:

(55) a. a big lad
b. a terrible doctor
c. a complete description

In these examples the adjectives *big*, *terrible* and *complete* receive their literal interpretation: in (55)a *big* is refers to physical size, *terrible* in (55)b negatively evaluates the quality of the doctor, while *complete* in (55)c describes something which is not missing any of its component elements.

The difference in interpretation correlates with a difference in the type of nouns modified. More precisely, the nouns illustrated in (54) and (55) are nouns which were shown to be gradable and non-gradable, respectively, by previous gradability tests. So the availability of the degree reading of such adjectives identifies gradable nouns.

"Degree adjectives" make up a rather heterogeneous class.[37] Bolinger (1972), Paradis (2001) show that the adjectives that are most often adapted to this use are the ones that refer to extremes, or embody the notions of absoluteness and extremity (what Bolinger calls "hyperbolic boosters"). In this section we will mainly focus on the distribution of three classes of adjectives on the relevant degree reading. The

[37] It should also be noted that the use of these adjectives is often collocational in nature and, consequently, there are many lexical irregularities in their distribution, as well as some differences across English and Romance among otherwise similar adjectives. More examples will be provided in chapter 4.

first class consists of adjectives which in their literal sense express size (e.g. *big*, *great*, *huge*, *colossal*, *enormous* etc.). The second class includes adjectives which in their basic use express purity, totality and veracity (*utter*, *pure*, *total*, *complete*, *perfect*, *sheer*, *true*, *real*, *veritable*, *positive*, *regular*, *absolute*, *outright* etc.). The third class of adjectives that will be discussed includes adjectives which, in their literal use, express psychological or sensory impact, singularity and quality evaluation (*surprising*, *astonishing*, *amazing*, *terrific*, *incredible*; *remarkable*; *exceptional*, *extraordinary*, *unusual*; *awful*, *terrible*, *horrible*, *unspeakable*, *wonderful*, *gorgeous*, *magnificent* etc.); we will henceforth refer to these as "evaluative adjectives". As often noted in the literature (Doetjes 1997, Paradis 2001, Katz 2005 a.o.), these modifiers seem to lose most of their lexical meaning and only retain the high degree component. As can be easily seen, most of these adjectives also have adverbial counterparts that can be used as degree modifiers of gradable adjectives and verbs or of the entire nominal predicate: *utterly*, *totally*, *completely*, *real/ly*, *absolutely*, *surprisingly*, *incredibly*; *extraordinarily*, *unusually*; *awfully*, *terribly* etc. Size adjectives do not (all) have such direct adverbial counterparts, though semantically they seem, at least intuitively, to correspond to degree modifiers like *much* and *very* (but see Morzycki 2009 for a different view).

Taking as a starting point the results of the previous tests, it can be observed that degree adjectives may modify both [+human] gradable nouns (e.g. *idiot, fool, enthusiast*, *genius* etc.; *eater*, *drinker* etc.) and [-human] gradable nouns, both mass and count (e.g. *nonsense*, *courage*, *negligence* etc.; *deal*, *bargain*, *effort* etc.; *mistake*, *failure*, *success*, *blunder*, *masterpiece*, *blaze*, *extremes*, *trivialities*, *appetite* etc.; *boon*, *gyp*; *disaster*, *chaos*, *mess* etc.)[38] (cf. Bolinger 1972, Van de Velde 1996, Tovena 2001, Giry-Schneider 2005, Grossman and Tutin 2005, Marengo 2005, Morzycki 2009). Below are examples of all three classes of adjectives modifying nouns from each class:

(56) a. a {big/ enormous/ huge} {idiot/ jazz enthusiast/ beer-drinker}
b. great {courage/ patience}
c. an {enormous/ huge} {problem/ blunder}

(57) a. a {complete/ real} {fool/ idiot}
b. real {courage/ nonsense}
c. a {complete/ total/ real} {failure/ success/ blunder}

(58) a. a {terrible/ amazing} {fool/ coward/ bore/ blunderer}
b. {incredible/ amazing} {courage/ patience/ nonsense}
c. an {awful/ terrible} {mess/ failure}

[38] When an abstract mass noun denoting a property is modified by adjectives like *great* the interpretation is equivalent to that obtained when a quantity expression like *a lot* is used (cf. Van de Velde 1996). This may be why the two types of expressions cannot co-occur, unlike with other types of nouns:

(i)	[English]		[French]
a.	great courage	a'.	un grand courage
b.	a lot of courage	b'.	beaucoup de courage
c.	*a lot of great courage	c'.	*beaucoup de grand courage

There is another class of nouns that seemed to behave like gradable nouns according to (some of) the other gradability tests reviewed, namely nouns that are interpreted in terms of stereotypical properties associated with the respective class (on a possibly figurative, metaphorical interpretation). An important difference now arises once the test of modification by degree adjectives is applied. Consider the following examples which contain nouns that were shown to allow such interpretations:

(59) a. a big {lawyer/ man/ child/ palace}
b. a terrible {lawyer/ linguist/ prince/ clown/ man/ child}

These examples show that these nouns cannot be modified by degree adjectives on the relevant interpretation. The resulting interpretation is fundamentally different. In (59)a, with *big*, only the basic, literal meaning is available, namely size, either concrete, physical size (as with *man* and *palace*), or more abstractly as importance or fame (as with *lawyer*, *linguist*). In (59)b the nouns can also only be interpreted in their basic, literal meaning and the adjective *terrible* also receives its basic qualitative, evaluative interpretation: the examples say something about the professional or personal quality of the individuals. Consequently, the nouns so modified cannot be used in examples parallel to examples with *such* encountered in §2.1.2, which would require a figurative, stereotypical interpretation of the nouns. The contrast is illustrated in (60) and (61):

(60) a. Their new place is such a palace!
b. Don't be such a child (about it), dad!

(61) a. Their new place is a big palace.
b. Dad is a big child.

The stereotypical interpretation of *palace* and *child* is not available in (61). When acceptable, (61)a forces a literal interpretation, where the place is said to belong to the category of actual palaces that are large in size. Such a literal interpretation is totally deviant in (61)b though.

One adjective which stands out in this context is the adjective *real*: unlike the other degree adjectives considered above, *real* can modify nouns used with a figurative interpretation (it embraces metaphorical extensions – cf. Bolinger 1972 from whom example (62)a is drawn):

(62) a. He is a real lawyer, the way he goes about proving his case.
b. This boy is a real clown!
c. Their new house is a real palace!
d. This place is a real pigsty!

In this, it also differs from the closely related adjective *true*: the entity described by *true* must belong to the category that is named and is then described as typical of its

essence. Thus, while in (62)a he may be just a student, in (63) he must be a lawyer by profession.

(63) He is a true lawyer, a credit to his profession.

The adjective *true* does not seem to be sensitive just to gradability, but to another sort of meaning, as suggested by the contrast between the following sets of examples which contain nouns that are otherwise non-gradable (cf. Bolinger 1972 who notes that it is restricted to gradable nouns and "semantically rich" non-gradable nouns):[39]

(64) a. It was a true symphony.
b. I had a true vacation.
c. A true doctor would not prescribe that kind of treatment.

(65) a. ?He's a true farmhand.
b. ?That is a true telescope.
c. ??That's a true car.

In fact, *real* can also modify nouns that do not qualify as gradable by other criteria:[40]

(66) That's a real car!

In chapter 4 we will examine the distribution and interpretation of the adjectives *true* and *real* in more detail and argue that they are in fact not true degree adjectives, in the sense that they do not depend on, or make use of, a gradable meaning, i.e. the presence of an ordering of the individuals in the domain of the noun with respect to the degree that a gradable property holds of them. This, however, raises an additional question, concerning the (non-)gradable status of nouns interpreted stereotypically (possibly figuratively): since the only adjective that seems to be compatible with them finally turns out not to be a degree adjective, then it may be concluded that the test of modification by degree adjectives excludes this set of noun interpretations from the realm of gradability. Does this mean that the tests considered in the preceding sub-sections, which seemed to accommodate this class of nouns, would also need to be analysed in a different way? This is, in fact, what will be argued for in chapter 3 (for independent reasons).

It should be noted that modification by degree adjectives is often marked by lexical variations and restrictions, and some problematic cases arise too in relation to some of the (non-figurative uses of) nouns that came out as gradable according to other tests. There are irregularities among [-human] count nouns with respect to the acceptability or exact interpretation of some of these adjectives. Consider the following examples which contain nouns that have qualified as gradable according to previous tests:

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[39] The examples in (64) and (65)a,b are from Bolinger (1972).

[40] The example in (66) is also significant in that it also points to a difference between *real* and *such*. While the examples in (62) contain nouns that, on a similar interpretation, can be modified by *such*, the noun *car* cannot:
(i) #That's such a car!

(67) a. *a {big/huge} stink
a'. ??{huge/ great} trivialities
b. a terrible smell
b'. a terrible mistake

These nouns do not seem to accept modification by adjectives like *big*, *terrible* etc. in the relevant degree sense. With adjectives of size the result is, however, infelicitous, as in (67)a-a'. In (67)b-b', with the adjective *terrible*, an interpretation in terms of qualitative evaluation is available. For example, *a terrible smell* is most easily understood as a *bad smell*, as opposed to *a pleasant smell*, i.e. the adjective is interpreted in its regular modificational sense. With *mistake*, the intended degree interpretation is more likely than a purely qualificational interpretation of the adjective *terrible* (or even *bad*) since we do not normally contrast *bad mistakes* with *good mistakes* (cf. Bolinger 1972). The regular qualificational interpretation is not completely excluded, however, as one may oppose *terrible mistakes* to *harmless/ insignificant mistakes* etc. In addition, other restrictions may be noticed. For example, certain [+human] nouns, especially those derived from (activity) verbs (e.g. *eater, drinker* etc.), but not only, cannot be modified by adjectives of totality, though they accept other degree adjectives:

(68) *a {complete/ perfect} (cheese-)eater

Finally, there are often rather collocational restrictions occurring in these adjective-noun combinations:

(69) a. high acclaim
b. *deep acclaim
c. deep disgrace
d. *high disgrace

In sum, however, if one puts these idiosyncrasies aside, some patterns emerge quite clearly, and the test of degree modification by adjectives appears to be the most restricted one so far, in the sense that it applies to the nouns that qualified as gradable to the previous two tests too, with the exception of figurative, metaphorical interpretations of nouns. They seem to only combine with those nouns that quite straightforwardly include a gradable property in their lexical meaning (e.g. *idiot*, *fool*, *enthusiast*, *eater*, *mess*, *blunder* etc.), or directly name such a property (as is the case with abstract mass nouns referring to properties – e.g. *courage*, *patience*, *negligence* etc.). In chapter 4, such modification will be re-examined in more detail in order to see whether it provides evidence in favour of the existence of adnominal degree modifiers/ operators.

2.3 *N of an N* and *seem*

The two contexts that will be presented in this last sub-section involve more complex syntactic structures, where gradability would become relevant outside of the N. These consist of the possible occurrence of nouns in the first slot of the so-called *N of an N* construction (e.g. *that idiot of a doctor*) and in the non-sentential complement of *seem* (e.g. *He seems a fool*.). While the former is found cross-linguistically, the latter context and its restrictions are rather specific to English. These possible tests for gradability turn out to be the most problematic. This is why they will be only briefly examined here and will be provided a more detailed account in chapter 2, which will completely exclude them as tests for gradability.

2.3.1 *N of an N*

There is a line of research in the literature which claims that the *N of an N* construction illustrated in (70) is a typical environment for gradable nouns (cf. Bolinger 1972, Matushansky 2002c, Corver 2008 a.o.), i.e. only gradable nouns can appear in the first slot of the construction (henceforth, N_1); non-gradable nouns cannot, as ilustrated in (71).[41]

(70) a. that idiot of a doctor
b. that fool of an engineer

(71) a. *that lad of a brother of yours
b. *that lawyer of a son of yours

This suggests that the possible occurrence of nouns in the N_1 slot of the *N of an N* construction can be used as a test for gradability. However, the results turn out to diverge from the outcome of the tests considered so far, and cross-cut the distinctions arrived at previously.

To start with, there are nouns that categorize individuals based on a gradable property which came out as gradable according to the previous tests but which cannot be used as N_1s:

(72) a. ??*that (jazz-)enthusiast of a doctor
b. *that eater of a doctor

Similarly, among the [-human] nouns identified as gradable before, some but not all can be used as N_1s, and the distinctions do not seem to follow any of the possible sub-classes identified before in terms of how salient the degree interpretation is in contexts such as *wh*-exclamatives.

(73) a. that mistake of a {relationship/ child}

[41] The examples in (70)-(71) are from Bolinger (1972).

b. a failure of an attorney

(74) a. *that problem of a decision
b. *that success of an attorney
c. *that mismatch of a fixture
d. *that {stink/ fragrance} of a breeze

Abstract mass nouns denoting properties can generally not be used as N_1, as indicated by (75), though we do find the noun *nonsense* used as N_1, as in (76):

(75) *that wisdom of a saying

(76) that nonsense of a definition

The problem with examples like (75) may be that mass nouns are generally not good as N_1 in *N of an N*, unless they can undergo a mass-to-count shift associated to a change in meaning from designating the property to a concrete instantiation of it, i.e. denoting an individual which is characterized by the respective property, as in (77), which refers to a 'beautiful boat/ performance'. For the examples in (72) and (74), however, such an explanation is not available, and the reasons for the differentiated acceptability must still be sought elsewhere.

(77) a beauty of a {boat/ performance}

More complications arise in the data. Consider, for instance, the following examples:

(78) a. a peach of a day
b. a flower of a girl
c. one hell of a story

The nouns are used metaphorically here, though it is hard to identify exactly what properties they attribute to the given individuals, apart from conveying some sort of emotive, subjective evaluation, either positive or negative. According to other tests, these nouns do not qualify as gradable: they cannot be modified by degree adjectives like *big*, as shown by (79). This is not surprising given that it has already been shown that nouns under a figurative, stereotypical interpretation are generally not compatible with modification by degree adjectives. But, in addition, some also fail to combine with *such*, which was seen to be otherwise compatible with noun interpretations of a similar sort (i.e. figurative, stereotypical), as shown in (80).

(79) a. #The day was a big peach.
b. #The girl is a big flower.
c. #The story was {a/ one} big hell.

(80) a. ??The day was such a peach!

b. ?That girl is such a flower!
c. ??The story is such (a) hell!

In sum, the proposal that occurrence in the N_1 position is determined by the gradability does not seem to be straightforwardly supported by the data. In chapter 2, section 2, we will re-examine *N of an N* constructions in more detail and show that it is in fact not gradability, but a different factor, namely the expression of a value judgment, that determines the possible occurrence of a noun in the N_1 position. As such, occurrence in the *N of an N* construction is not a test for gradability.

2.3.2 *Seem*

The last potential test for gradability to be considered consists of the possible occurrence of nouns in the complement of *seem*. It has been argued in the literature that when *seem* takes a non-sentential complement, generally assumed to be a small clause, only gradable expressions can be used (e.g. Bolinger 1972, Maling 1983, Matushansky 2002b). The examples below illustrate the basic contrast between the acceptability of gradable adjectives, nouns and prepositional phrases in the small clause complement of *seem*, and the unacceptability of non-gradable expressions.[42,43]

(81) a. The music seems nice. [gradable AP]
b. His nationality seems irrelevant.

(82) a. *The music seems choral. [non-gradable AP]
b. *His nationality seems British.

(83) a. What he writes seems nonsense. [gradable NP]
b. He seems a {genius/ fool}

(84) a. *What he writes seems history. [non-gradable NP]
b. *He seems a {wizard/ doctor}.

(85) a. Lee sure seems out of his mind. [gradable PP]
b. Lee sure seems under the weather.

(86) a. *Lee sure seems out of the house. [non-gradable PP]
b. *Lee sure seems under the old apple tree.

The ungrammatical examples above become good if *to be* is supplied, which shows that the restriction only applies to small clause complements of *seem*.

[42] Note that plural count nouns are not normal after *seem*:
(i) a. The thing he did seemed a mistake.
b. *The things he did seemed mistakes.
In addition, while NPs of the right type are generally accepted in the small clause complement of *seem* in British English and Canadian English, they are generally rejected in American English.

[43] Most of the examples in (81)-(86) are taken or adapted from Bolinger (1972), Maling (1983), Matushansky (2002b).

(87) a. The music seems to be choral.
b. He seems to be a doctor.
c. Lee seems to be out (of the house).

The examples also improve if an expression of approximation, or a degree modifier, is used, i.e. an expression which shows the degree of applicability of the predicate, as in (88) (Bolinger 1972, Matushansky 2002b). The addition of a degree modifier has been argued to trigger scalarity coercion, which changes the meaning of the non-gradable expressions so that they can be interpreted as gradable (Matushansky 2002b). As a result, the expressions count as gradable and can be used in the small clause complement of *seem*.

(88) a. The music seems almost choral.
b. You'd seem such a linguist!

The picture is, however, more complicated than it might look at first sight. And the complications in the data do not seem to follow a distinction between gradable and non-gradable expressions along the lines suggested by the tests considered previously. For example, adding an adjective seems to improve examples containing non-gradable nouns, as illustrated in (89)a. However, not all adjectives, even if gradable, behave alike with respect to licensing a noun in the small clause complement of *seem* (Matushansky 2002b), as illustrated in (89)b:

(89) a. Eric seems a {capable/ good/ lousy/ exceptional} {wizard/ doctor/ dancer}.
b. Eric seems a {*French/ *tall/ ??handsome} {wizard/ doctor/ dancer}.

Conversely, adding an adjective to a gradable noun seems to remove the ability of that DP to appear in the complement of *seem* (Matushansky 2002b), though, again, this does not hold for all adjectives, as shown in (90).

(90) a. Eric seems a {*French/ ??handsome} fool.
b. He seems {a big fool}/ {a real idiot}.

In addition, one may find examples of nouns which came out as gradable according to other tests, but which do not seem to be able to occur in the small clause complement of *seem* (though they can otherwise be used predicatively):

(91) a. ??He seems a cheese-eater.
b. ??Her new perfume seems a stink to me.

On the other hand, there also seem to exist cases of non-gradable nouns that are acceptable in this environment, as illustrated in (92) and (93).

(92) a. He seems a Christian.
b. He seems an artist.

(93) a. This seems the end for us.
b. This seems the way to do it.

Note also that the nouns in (92) are not interpreted figuratively, like those in (94) below; the latter show that nouns under this interpretation are also allowed in the small clause complement of *seem*.

(94) a. This house seems a palace after the shelters where we have passed our nights for the last couple of weeks.
b. This child seems a clown (at times).

In sum, such facts shed doubt on the view that distribution in the small clause complement of *seem* is determined by the gradability of the lexical items involved, hence on the reliability of this possible gradability test. In chapter 2, section 3, we will investigate the distribution and interpretation of expressions in the small complement of *seem* in more detail and show that an alternative account is needed.

2.4 Summary and discussion of results

It can be observed from the discussion in the preceding sub-sections that the various gradability tests that have been proposed turn out to yield different results. This raises questions concerning the status of the nouns involved and/or the reliability of the tests themselves. In what follows we will summarize the results of the tests, as well as indicating the problematic issues that arise from this brief examination.

Among the tests for gradability discussed, the *N of an N* and *seem* tests turn out to be rather problematic: their results do not seem to pattern in any obvious way with the others, which makes their reliability as tests for gradability questionable. Modification by degree adjectives seems to be the most restricted test, in spite of certain idiosyncrasies and irregularities. Degree adjectives seem to provide a good indication of inherent gradability. The nouns which can be thus modified are generally a subset of the nouns that come out as gradable according to other tests, namely, *wh*-exclamatives, *such*, *quite*, and predicative partitive structures. Degree adjectives thus seem to be good candidates for elements that function as degree operators or modifiers in the nominal domain, similarly to expressions like *very* or *terribly* in the adjectival domain. Recall, however, that for *real*, it was suggested that its distribution and interpretation do not seem to be reducible to gradability. Finally, the distribution of *wh*-exclamatives, *quite*, and predicative partitive structures with respect to classes of nouns seems to be very wide. Consequently, it is hard to use them in order to single out a specific class of nouns that we might want to classify as gradable.

Among the classes of nouns or noun interpretations discussed, a problematic case is that of figurative, stereotypical interpretations, including epithets, or epithetic uses of nouns. These pass some, though not all of the tests reviewed. Nouns under such interpretations can be used in *wh*-exclamatives and with degree *such*, but they cannot be modified by degree adjectives with the exception of the adjective *real*.

There are two logically possible ways to approach these facts. One would be to regard them as gradable meanings, possibly as the result of scalarity coercion, whereby basically non-gradable nouns are coerced into a gradable meaning. This would be triggered by the *wh*-degree operator or by the degree operator *such* (as proposed e.g. by Matushansky 2002b), as well as *real*, while other degree adjectives would not be able to coerce the meaning of the modified nouns in this way. This would account for their differentiated distribution in these environments. Alternatively, it might be concluded that figurative interpretations are not gradable, and then *real* and the other two tests would need to be analysed in a different way.

Putting these problematic cases aside, the results of the tests examined in this section may be summarized as in Table 1 below which indicates the classes of nouns that come out as gradable according to most tests:

	Type of noun		Examples
I.	[+human] [+count]	categorize, or qualify, individuals based on a gradable property	*idiot*, *fool*, *genius*, *coward*, *(jazz-)enthusiast*, *blunderer*, *liar*, *eater* etc.
II.	[-human] [+/-count]	denote qualities, states, situations, emotions, or other sorts of more or less abstract objects	*courage*, *patience*, *negligence* etc.; *chaos*, *disorder* etc. *nonsense*, *mess*, *flop*, *fiasco*, *disaster; surprise*, *shock*, *shame*, *appetite*, *extreme*, *difficulty; stink*, *fragrance*, *boon*, *gyp*; *mistake*, *failure*, *success*, *blunder*, *masterpiece*, *inconvenience*, *appetite*; *deal*, *bargain*, *effort* etc.

Table 1: nouns that qualify as gradable according to most tests

Class I contains nouns which categorize, or qualify, [+human] individuals based on a gradable property. They are generally derived from or otherwise related to adjectives (e.g. *idiot*, *enthusiast* etc.), derived from gradable or non-gradable activity verbs (e.g. *liar*, *eater* etc.), or from other (gradable) nouns (e.g. *blunderer*). Class II contains [-human] nouns of various sorts. At least some of the nouns in class II may be understood as qualifications applying to [-human] entities in a parallel way to how the nouns in the first class denote [+human] individuals characterized by a property: e.g. *mess*, *flop*, *fiasco* etc. qualify objects or situations via a certain property or state, similarly to how nouns like *idiot*, *fool* etc. categorize individuals via a property. Their meaning can often be paraphrased in terms of a more general term (a hyperonym) plus an adjective expressing some kind of qualification: e.g. *deal/ bargain* – 'advantageous transaction'; *fortune* – 'great wealth/ large sum of money', *failure* – 'unsuccessful attempt' etc. The presence of a gradable property in the meaning of the nouns can be quite transparent since they are often morphologically derived from or otherwise related to an adjective or a verb. This is particularly clear with abstract mass nouns denoting qualities, such as *courage*, *patience*, *wisdom* etc., but also with nouns like *extremes*, *difficulty* etc.

To conclude, on the one hand, it has been shown that there is a general category of nouns that seem to qualify as gradable based on their similar behaviour (i.e. interpretation and distribution) in certain environments. On the other hand, it has also been shown that some problematic issues arise concerning the reliability of the tests reviewed, and there are indications that some of the tests should be given alternative accounts. The discussion in this second part of the chapter thus provides the ground for the coming chapters, as outlined in the next section.

3 Outline of the dissertation

In chapter 2 we examine two environments that have been claimed to involve gradability, and where gradability would be relevant for the well-formedness of more complex structures containing the nouns, namely *N of an N* constructions (e.g. *that idiot of a doctor*) and the small-complement of *seem* (e.g. *He seems a fool.*). In §2.3 it was already pointed out that using these as tests for gradability appears to be rather problematic in the sense that their results do not seem to pattern in an obvious way with those of the other tests. This is why we start out with these cases: we would like to know immediately whether they say anything about gradability in nouns or whether they should be eliminated as possible tests for gradability. In chapter 2 it will be argued that that the distribution of nouns in these contexts is not determined by gradability – whether at the lexical or syntactic level – but by other factors which partly overlap with gradability and, under certain circumstances, create similar effects. In the case of *N of an N* constructions, it will be shown that the necessary and sufficient condition for a noun to occur in the first slot of the structure is that it can express a value judgment. As for *seem*, this will be argued to be an epistemic verb that contains an evidential meaning component. The restrictions on its small clause complement will be shown to follow from the necessary compatibility with the uncertainty of assessment involved in the meaning of the verb combined with certain limitations that exist on what may be used as evidence based on which one can evaluate whether a property holds; these limitations do not exist when it comes to evaluating complex situations or propositions, as expressed by sentential complements – hence the lack of restrictions on these complements. Gradable expressions are only a subset of the expressions that may occur in this environment; in addition, it is no the case that all gradable expressions automatically make good small clause complements to *seem*. Consequently, these two environments will be excluded as tests for gradability. The distribution of nouns in these contexts cannot be used evidence in favour of positing a gradable structure in their semantics or of a degree projection in their syntax. These two case studies show how various factors may conspire so as to make believe that gradability and degree are involved.

Chapter 3 focuses on an examination of "degree" *such* and argues that it is not a degree operator. Its distribution will be shown not to be limited to gradable nouns, or nouns that can be modified by other (potential) degree modifiers, and the interpretation not to be in terms of degree. It will be argued instead that all instances

of *such*, including the so-called "degree" *such*, are in fact cases of kind-reference. What accounts for the differences in distribution (and interpretation) between the so-called "degree" and "kind" *such* is that the semantics of the former comes with particular requirements concerning the construal of sub-kinds it can select. More precisely, this *such* selects salient sub-types that can be identified by natural consequences, which may be explicitly expressed by result clauses or left implicit, as in the exclamative use. Once again, gradable nouns are only a subset of the nouns that make available the required sort of sub-types. Consequently, co-occurrence with *such* in exclamatives or with result clauses is not a test for gradability either. This proposal immediately raises questions concerning other structures which have been analysed in a similar way to *such* in the literature, namely *wh*-exclamatives and *quite*-structures, as well as predicative partitive structures (i.e. *more of an N*). These will be briefly examined in the last part of the chapter, where it will be suggested that they offer no evidence for the presence of gradable structure in nouns that would be similar to that found with gradable adjectives.

Chapter 4 turns to an examination of degree adjectives, which, from the overview in section 2 of this chapter, appeared to offer the most reliable test for gradability and the most promising candidates for adnominal degree expressions. However, the more detailed investigation of degree adjectives in three classes (namely, size adjectives, *real*-type adjectives and evaluative adjectives) will shed doubt on this starting hypothesis. It will be shown that the distribution and interpretation of size adjectives do not support a degree analysis of these expressions, but rather favour an alternative account in terms of (abstract) size of properties, on which the adjectives do not manipulate gradable structures in a way that would be parallel to what happens in the case of degree modification of gradable adjectives. *Real*-type adjectives will also be argued not to be adnominal degree operators, but rather epistemic/ evidential adjectives. As for evaluative adjectives, the facts are less conclusive. They may be analysed as adnominal degree modifiers, but the facts do not exclusively require such an analysis. In addition, they also show differences as compared to their adverbial counterparts that function as degree modifiers in the adjectival domain (e.g. *terribly* etc.). An alternative, non-degree account is possible, which capitalizes on their evaluative meaning. In sum, the behaviour of "degree adjectives" does not provide conclusive evidence for the existence of adnominal degree operators or modifiers. Even though in these cases similar interpretations are obtained to those obtained in the adjectival domain via degree modification, they are brought about by different mechanisms. This suggests that there is no parallel between the nominal and adjectival domains with respect to gradability, whether semantically or syntactically.

The investigation carried out in chapters 2-4 points to the same conclusion, namely that there is a fundamental difference between nouns and adjectives with respect to gradability, and that nominal gradability is an illusion rather than a grammatical reality. Chapter 5, the concluding chapter, discusses the implications of these results for a theory of gradability that wants to account for the difference between the two domains.

Chapter 2 GRADABILITY VS. EVALUATION

1 Introduction

This chapter consists of two case studies: we will examine *N of an N* constructions (e.g. *that idiot of a doctor*) and the small clause complement of the verb *seem* (e.g. *He seems a fool*.), both of which have been claimed to be environments that involve gradability. It will be shown, however, that it is not gradability that determines the possible occurrence of nouns in these contexts, but rather something different, which can be subsumed under the term "evaluation". The way evaluation plays a role is different in the two cases. *N of an N* constructions, which are studied in section 2, are sensitive to the expression of a value judgment. This will be argued to be the necessary and sufficient condition for a noun to occur in the first position of *N of an N* constructions. In the case of *seem*, which will be examined in section 3, the evaluation has to do with assessing whether a property or a situation holds or not. This is an evidential and/or epistemic notion that will be shown to play a role in the distribution of expressions in the small clause complement of *seem*.

2 *N of an N*

2.1 Introduction

As discussed in chapter 1 (§2.3.1) the possible occurrence of a noun in the first position (henceforth N_1) of the *N of an N* construction, illustrated in (1), has been claimed to depend on whether the noun is gradable or not (cf. Bolinger 1972, Matushansky 2002c).

(1) that idiot of a doctor

In chapter 1, however, questions were already raised concerning the reliability of this test for gradability in light of the diverging results obtained as compared to other gradability tests, such as the test of modification by degree adjectives.

In this section we will examine more carefully the overall interpretation of the construction, and, more in particular, the contribution of and semantic constraints on the nouns that occur as N_1, in order to reveal the factor(s) that determine the ability of a noun to occur in this position. It will be shown that in fact it is not gradability that constitutes a prerequisite for a noun to occur as N_1 in these constructions, but rather the expression of a value judgment (along the lines of Milner 1978, Ruwet 1982, Den Dikken 2006, Villalba and Bartra-Kaufmann 2010). Moreover, it will be shown that gradability and the expression of a value judgment (generally referred to as "evaluation" in the literature), are not the same, but partly overlap, which explains the often mixed views we can find in the literature.

2.2 Gradability and value judgement in the literature on *N of an N*

The ways in which the *N of an N* construction is treated in the literature vary considerably. Nevertheless, three main types of approaches can be identified depending on the notions used in characterizing the constraints on possible N_1s.[44] In one view, occurrence of a noun as N_1 in these structures depends on its being gradable, either inherently or due to coercion. A different line of thought takes the essence of the interpretation of these constructions to be the expression of a value judgment. In other works, the two notions are combined or used interchangeably.

This sub-section will give an overview of the literature, focusing on the notions that are used in describing potential N_1s, i.e. gradability and the expression of a value judgment. It will be revealed that some confusion is often found in studies on *N of an N*, which seems to stem from the lack of a necessary distinction between the two notions. It should be noted in this context that even when there is no confusion within one particular study and only one notion is made use of, there is often no discussion of or direct argumentation against the alternative views. In addition, a clear definition of the terms used and/or discussion of the notions they cover, especially in contradistinction to other notions used elsewhere, are generally missing. Hence, there is almost no discussion of the relation between gradability and the expression of a value judgment, which, as it turns out, is essential for a proper understanding of the interpretation of *N of an N* constructions and of the factors that determine the possible occurrence of a noun as N_1.

[44] Note that a distinction is sometimes made in the literature between different types of *N of an N* constructions, often based on different criteria, hence drawing the lines in different places (e.g. Napoli 1989, Doetjes and Rooryck 2003, Den Dikken 2006). In all cases, however, at least one of the types identified is argued to involve gradability, or evaluation, or both. We will mostly abstract away from these distinctions in this section, as we will argue that one notion is relevant for all types (see §2.3).

We will also not discuss the syntactic analyses proposed (e.g. whether a predication or modification relation is assumed to underlie these structures), since a syntactic account of these constructions is beyond the scope of our work. We will only retain the insights concerning the interpretive contribution of the N_1, and the ensuing characterization of the class of possible N_1s.

2.2.1 Gradability

As discussed in chapter 1, the gradability view on *N of an N* constructions has been most notably expressed in Bolinger (1972). He argues that only gradable nouns can be used as N_1 in this structure, as shown by the contrast in (2). He includes figurative, or metaphorical, uses of inherently non-gradable nouns in the class of gradable (uses of) nouns, as illustrated in (3):

(2) a. that fool of an engineer
b. *that lad of an engineer

(3) a. that baby of a brother of yours
b. that box of a house

Similarly, Matushansky (2002c) argues that nouns which naturally appear as N_1 are gradable, while nouns that are not natural N_1 may be coerced into being gradable. She analyses the *N of an N* construction as a modificational structure containing an emotive exclamative operator, which she defines as a special type of degree operator. Consequently, on this account, it is the exclamative environment that imposes certain gradability constraints on the construction and the *N of an N* construction is predicted to end up having a high degree interpretation given the presence of the degree operator.

There is also a different type of approach in the literature, centred on the expression of value judgment, which we will now go on to consider.

2.2.2 Value judgment

There is another line of research that takes the essence of *N of an N* constructions to be the expression of some sort of emotive, personal, or subjective, evaluation.[45] The value judgment has been shown to be typically negative (e.g. insults) (cf. Milner 1978, Ruwet 1982), though not exclusively so. The use of nouns in *N of an N* constructions is thus akin to epithet (uses of) nouns. Epithets are noun phrases used to characterize the nature of an individual (e.g. *idiot, bastard, sissy, jerk* etc.), and

[45] A note on terminology is in order here. In the relevant subset of works referred to in this section the term "evaluation" is most often used to describe the interpretive contribution of N_1. However, using terms such as "evaluation" and "evaluative" is confusing, especially in the context of a discussion that also includes references to gradability. This is because the same term is used in other works to refer to a subclass of (gradable) adjectives (e.g. *beautiful, interesting, industrious* etc.), in contradistinction to dimensional adjectives (e.g. *long, tall, wide, short* etc.) (cf. Bierwisch 1989), while in other studies it is used to refer to the standard-related or non-neutral interpretation of adjectives in e.g. the positive form (cf. Rett 2008a,b). The evaluation present in the case of *N of an N* constructions is of a different nature, and refers to the expression of a value judgment, which involves subjective appraisal and can be more or less emotionally-charged. See §2.3.1 for a definition. Therefore, we will refrain from using the term "evaluation", and favour instead the more straightforward term "value judgment". In the overview of the literature in §2.2.2 and §2.2.3, however, the term "evaluation" will still be used at times, since this is the term employed in the works referred to.

may be stereotypical; they contribute mainly affective meaning, which is typically negative: contempt, anger, irony etc.[46]

Milner (1978), for example, looking at French data, claims that only a closed class of nouns, which he calls *noms de qualité* ('quality nouns'), can appear as N_1. These are nouns like *imbécile*, which are claimed not to have their own extension or definition out of context, being inherently connected to the speech situation (hence having no referential autonomy, similarly to pronouns). They are claimed to be non-classifying nouns and to be marked with a [+quality] feature in the lexicon that distinguishes them from ordinary classifying nouns. Milner points out that no other nouns can appear in the first position of such structures, unless they undergo a shift in meaning with stylistic effects; he treats such examples as cases of recategorization ("changement de catégorie", "calembour syntaxique"), as in *ce tyran de Paul* 'this tyrannical Paul'.

Ruwet (1982) argues that almost any nouns can be inserted in the N_1 slot, as long as they are understood as insults. Hence, the class of nouns admissible as N_1 is that of possible epithets. He argues against the two-way lexical distinction Milner proposes, and claims that it is an illusion stemming from the fact that Milner only discusses extreme cases in his examples: profession nouns like *professeur*, as non-quality, on the one hand, and nouns like *idiot*, *salaud*, as quality nouns, on the other. Instead, Ruwet shows that there is in fact a continuum between these. He proposes that all nouns have their own semantic content, which, associated with certain pragmatic conditions and general world knowledge, determines whether or how appropriately a noun can be used in affective contexts, such as the *N of an N* structure, which he takes to be associated with a semantic rule that contains a (generally unfavourable) value judgment.

Recently, a similar way of viewing the semantic contribution of N_1 has been adopted by Den Dikken (2006),[47] who argues that N_1 can be any noun denoting something that is deemed suitable to compare N_2 to and that the (often metaphorical) comparison on which such constructions are based is always evaluative, often negative (see also Villalba and Bartra-Kaufmann 2010):[48]

(4) a. a jewel of a village
b. an idiot of a man

---

[46] Note that much work in syntax has focused on those epithet phrases which consist of a noun (phrase) accompanied by the definite article (e.g. *the idiot*, *the bastard*) or a demonstrative (e.g. *this/that idiot*, *this/that bastard*), and which can be used as anaphors (cf. Jackendoff 1972, 1977, Lasnik 1976, 1989, Chomsky 1981, Huang 2000, Aoun and Choueiri 2000, Corazza 2005 a.o.). This aspect of their behaviour, which has in fact come to be regarded as their defining characteristic, is illustrated below:

(i) John$_i$ promised to come, but the idiot$_i$ missed the train.

In this sentence, *idiot* is understood as an anaphor, inheriting its value from *John*; in addition, it also attributes to John the property of being an idiot.

However, it has also been argued that such behaviour is not limited to epithet phrases, as it is in fact more widely displayed by "incomplete descriptions" such as *the man* (Higginbotham 1985), as well as other definite descriptions, though with some differences (see e.g. Corazza 2005).

An examination of the anaphoric properties of such phrases lies, however, outside the scope of our investigation.

[47] The approach proposed by Den Dikken (2006) combines Milner's and Ruwet's insights for different subsets of the data (see Den Dikken 2006 for details).

[48] The examples in (4) are from Den Dikken (2006).

c. a horror of a story
d. that schoolmaster of a man

In (4d), for example, *schoolmaster* stands for a set of (typically negative) properties that schoolmasters are stereotypically thought to have (e.g. being authoritarian, correcting people all the time etc.), much as in its epithetic use in copular sentences like *He's a real schoolmaster*.

In sum, these works characterize N_1s as expressing a value judgment, hence taking them to be similar or even identical to epithets or epithet uses of nouns.[49] However, they do not address at all the alternative view presented above which takes gradability to be the condition on N_1s. A notable exception in this sense is Villalba and Bartra-Kaufmann (2010), who explicitly argue that these constructions (in Spanish) do not involve degree quantification but evaluation, which is lexically encoded, and hence highly idiosyncratic. This is the type of view we will defend too, but first we will also review a different type of approach that is found in the literature.

While the analyses reviewed so far take either gradability or the expression of a value judgment to be the essence of the *N of an N* construction, in other works the two notions are combined, collapsed or used interchangeably. It is to a discussion of such works that we turn now.

2.2.3 Gradability and value judgment collapsed[50]

A first example of the lack of a proper distinction that characterizes some of the literature presents itself in the work of Napoli (1989). On the one hand, she argues throughout that the nouns used as N_1 in these constructions must be predicates that express an evaluative judgment of the N_2. This, she notes, may be inherent in the meaning of the noun or not; in the latter case, it may come about by means of e.g. modification, "metaphorical extension or association". Thus, she adopts the view that "predicates fall naturally into an evaluative and a non-evaluative class with respect to their distribution and other properties" (Napoli 1989:192). However, when referring to other works in which this distinction among predicates has been proposed, she also mentions Maling (1983) and points out that she "uses the term *gradable*" (Napoli 1989:192). The problem here is that Maling talks about gradable predicates as standardly defined, while Napoli is talking about evaluative predicates, initially defined as expressing an "evaluative judgment". Unfortunately, she does not comment on the observed terminological difference ("evaluative" vs. "gradable") and whether it also reflects any other (semantic and/or syntactic) differences, hence

[49] Note that such a view cannot be upheld if "epithet" is understood in the sense in which it is generally defined in the syntactic literature, i.e. in terms of their anaphoric properties – see footnote 3 above, since not all N_1s can function as epithets in this way.

[50] This combination of the two notions is also transposed into the syntax, in the role assigned to the syntactic projections proposed in the representation of these structures. In many of the works referred to here (Doetjes and Rooryck 2003, Vinet 2003), the particular interpretation assigned to *N of an N* constructions is linked to a syntax involving an EvaluativePhrase claimed to be used in the sense of Cinque 1999, Ambar 2002, 2003. This projection, however, ends up being used in a double role, both as an evaluative phrase and as a (high) degree phrase.

whether her term "evaluative predicate" covers the same class of expressions as "gradable predicate".

Hulk and Tellier (2000) instantiate a somewhat similar case. They claim that *N of an N* constructions always convey evaluation, subjectiveness, or affectivity on the part of the speaker (i.e. amusement, irony, indignation, affection). Hence, the nominals that can occur in this construction are those that may bear an [affective] feature.[51] At certain points in their account, however, some lack of clarity creeps into the claims made or the terminology used. For example, they add that only those nouns that lend themselves to "scalar evaluation" can be N_1s. It is unclear whether the use of this term should be understood as implying that N_1s need to be both scalar, i.e. gradable, and evaluative, or whether it simply refers to evaluation which is scalar in the sense that it may differ in strength. In addition, they explicitly say that *N of an N* constructions do not involve a high degree interpretation, and do not postulate degree phrases in the syntax or a (semantic) gradability condition on N_1. However, they do not discuss at all the possible role of gradability (suggested by the term "scalar evaluation") or explicitly argue against a possible degree account either. This makes their position somewhat unclear.

The notions of gradability/degree and evaluation are most notably collapsed in the analysis proposed by Doetjes and Rooryck (2003),[52] at least for one class of the constructions they investigate, and which they label "pure degree". Here are some examples provided by Doetjes and Rooryck (2003):

(5) a. Ton phénomène de fille est distraite. [French]
your phenomenon of daughter is absent-minded
'That character of a daughter of yours is absent-minded.'

b. Ce bijou de Marie est absolument exquise.
this jewel of Marie is absolutely marvellous
'This jewel of a Mary is absolutely marvellous.'

They note that *phénomène* and *bijou* have completely lost their original lexical meaning and only contribute a strongly positive or negative evaluation of *fille* 'daughter' and a highly positive evaluation of Marie, respectively. They claim that, as such, these nouns express high or low degree of quality, and that this is a pure degree reading.

The notions of "evaluation" and "degree" (of a quality) are used interchangeably in this account. Evaluation is translated in terms of degree, and vice versa, as can be seen from their claims that N_1s express "an evaluation in terms of high degree over the qualified noun" (p. 285), and that "in the qualitative domain, 'pure degree' is interpreted as a strongly positive or negative evaluation" (p. 285). At any rate, "degree" is used to cover more or, rather, different things than it normally does when standardly used to talk about e.g. gradable adjectives. Therefore, while we will retain the intuition that N_1 contributes a strongly positive or negative evaluation, we

[51] Similarly to Milner (1978), who distinguishes between "quality" and "non-quality" nouns, they claim that nouns divide into two subclasses: those that may bear the [aff] feature and those that may not; this account therefore faces the same sort of problems – see Ruwet 1982 for criticism of such an approach.

[52] See also Vinet (2003) for a very similar approach to *N of an N* constructions, combining the notions of evaluation and degree, without a discussion of the relation between the two.

consider it necessary to disassociate this from the expression of "pure degree", as will be shown in more detail in §2.3.

Finally, Corver (2008) looks at a family of constructions including *N of an N* constructions and "evaluative vocatives" (e.g. *you idiot!*) and claims that the nouns that can be used there are (and, in fact, must be) "evaluative epithet nouns" in that their "use is intended as a judgment of value". These nouns have "an evaluative function", as well as "an intensifying meaning and may be qualified as [gradable] noun[s]". Therefore, the notions of evaluation and gradability are also combined in this characterization of potential N_1s as epithets, which, apparently, are required to be both evaluative and gradable.

To conclude, this sub-section has shown, firstly, that two recurring notions are used in the literature on *N of an N* constructions, namely evaluation (i.e. the expression of a value judgment) and gradability, and, secondly, that sometimes there is confusion in handling these notions: they are combined or used interchangeably, with no clear distinction being made. Even in the works where only one notion or the other is used, there is no discussion of the relation between them, which makes it hard to identify the exact factor determining the possible occurrence of a noun as N_1. This is a gap that needs to be filled. In order to gain a proper understanding of *N of an N* constructions, and of the constraints on possible N_1s, we need to clarify and distinguish these two notions. Only then can we proceed to identifying the decisive factor enabling a noun to appear in the *N of an N* construction. This is what the remainder of this section will undertake.

2.3 The essence of *N of an N*: value judgment, not gradability

The aim of this sub-section is two-fold. First of all, we will show that the expression of a value judgment and gradability are distinct, yet intersecting, notions, hence the confusion often found in the literature. Secondly, we aim to show that it is the expression of a value judgment that is both a necessary and a sufficient condition for N_1, while gradability is neither necessary nor sufficient. For ease of exposition, we will structure our argumentation following the syntactic complexity of the expression occupying the first slot of the *N of an N* construction, starting with an investigation of non-modified nouns as N_1, and going on to examine modified nouns, as well as cases where the first slot is solely occupied by an adjective. For each of these cases it will be shown which is the sufficient and necessary condition for an expression to occur in this position.

2.3.1 Clarifying the relevant notions

Before trying to isolate the factor that determines the ability of a noun to occur as N_1 in the *N of an N* construction, we need to clarify and distinguish between the notions that have been claimed to play a role.

First of all, the notion of "evaluation" which we take to be relevant for the interpretation of *N of an N* constructions refers to the expression of a value judgment (along the lines of Milner 1978, Ruwet 1982, Den Dikken 2006, Villalba and Bartra-Kaufmann 2010). Such speaker-based evaluation is necessarily subjective, or emotive in some sense. Examples of expressions that convey a value judgment include "affective" adjectives, and expressives in general:

(6) a. this damned dog [English]
b. ce foutu professeur [French]
this fucking teacher
'this fucking teacher'

Similar expressions can be found in the nominal domain – e.g. E *devil*, or F *sapristi*, *diable* etc. Here are some examples from English, French and Dutch which show that such expressions can occur in the first slot of the *N of an N* construction: (7) and (8) express a negative value judgment, while (9) conveys a positive judgment.

(7) that devil of a child [English]

(8) a. cette sapristi de femme [French]
this good.grief of woman
'this damned woman'
b. ce diable de moteur
this devil of engine
'this wretched engine'

(9) een kei van een meid [Dutch]
a cobble of a girl
'a fantastic girl'

We take this as a first indication that N_1s in *N of an N* constructions do not merely denote a property that is attributed to an individual, but they express a value judgment of the quality of the individual referred to by the N_2. Such evaluation may differ in polarity, i.e. it can be either positive or negative (in fact more often than not negative, as already mentioned in §2.2.2).[53] More evidence in this sense will be provided in the coming sub-sections.

Gradability, on the other hand, is a notion that applies to those expressions, usually adjectives, which express properties that can manifest in differing degrees and, as such, are compatible with degree modifiers like *very* and degree constructions like the comparative, which express varying degrees, or intensities, of the respective property.

[53] It has been shown extensively in the literature that the value judgment is typically negative (so most N_1s are pejorative and are interpreted as insults – cf. Milner 1978, Ruwet 1982, Napoli 1989, Den Dikken 2006 etc.), though there are also cases of positive evaluation, as can be seen from many of the examples used in the main text. (See Ruwet 1982 for discussion of the rather idiosyncratic behaviour of positively evaluative nouns, and Ruwet 1982, Napoli 1989, Corazza 2005 for discussion of various factors that may influence the positive vs. negative interpretation of N_1, such as the choice of determiner.)

(10) a. John is (very) tall.
b. John is taller than Mary.

In the case of nouns, the previous chapter has shown that there are certain classes of nouns which come out as gradable according to several tests, one of them being modification by degree adjectives. Here are some examples:

(11) a. a big (cheese) eater
b. a big jazz enthusiast

These examples show that nouns like *enthusiast*, *eater* etc. can be modified by adjectives like *big* in a degree sense. That is, the interpretation of such modificational structures occurs seems to parallel the interpretation obtained when an adjective is modified by a degree word like *very*. So *a big jazz-enthusiast*, for instance, is 'someone who is very enthusiastic about jazz'.

The examples in (10)-(11) and (6)-(9) show, respectively, that there are expressions which are only gradable, without expressing a value judgment, and expressions which only express a value judgment without being gradable. To illustrate the latter point, take the adjectives in (6), for example: they do not accept degree modification, as illustrated below, which indicates that they are not gradable:

(12) a. *this very damned dog [English]
b. *ce très foutu professeur [French]
this very fucking teacher

All this suggests that gradability and the expression of a value judgment are distinct notions.

However, the two categories intersect to some extent, in the sense that there are also expressions which are gradable as well as expressing a value judgment. A quite clear case (and one of the typical examples used in discussions of *N of an N* constructions) is the noun *idiot*, which categorizes individuals based on a gradable property, namely idiocy, and came out as gradable according to all the tests reviewed in chapter 1 (section 2). That this noun also expresses a value judgment is obvious particularly in its use as an epithet, for example in evaluative vocatives:

(13) a. John missed the train again, {the/ that} idiot!
b. You idiot!

If gradability and the expression of a value judgment are distinct notions (though intersecting in the way illustrated above), it is to be expected that there are contexts in which either one or the other will be exploited. Here we will argue that the *N of an N* is one such environment, which requires the expressions occurring in its first slot to convey a value judgment.

In the next three sub-sections, it will be shown that gradability is neither sufficient nor necessary, and that it is the possible expression of a (positive or negative) value judgment that is the sufficient and necessary condition for the

occurrence of an expressions in the first position of the *N of an N* construction, whether it is a non-modified noun, a modified noun or an adjective.

2.3.2 Non-modified nouns as N_1: *[N_1] of N_2*

In this sub-section we will examine *N of an N* constructions containing unmodified nouns in the first slot and aim to show that the requirement imposed on these expressions is that they express a value judgment. To start with, consider again our first example:

(14) that idiot of a doctor

As already discussed above, the N_1 used in this example, *idiot*, is gradable as well as expressing a value judgment. Consequently, based on such examples we cannot isolate the decisive factor that enables the noun to occur as N_1. We need to tease the two apart in order to see which one is the sufficient and necessary condition for N_1.

First of all, we will show that gradability is not sufficient for N_1. Evidence for this comes from the fact that not all gradable nouns can be N_1, as illustrated by the following examples repeated here from chapter 1 (§2.3.1):

(15) a. ??* that (jazz-)enthusiast of a doctor
b. *that eater of a doctor

(16) a. *that problem of a decision
b. *that success of an attorney
c. *that mismatch of a fixture
d. *that {stink/ fragrance} of a breeze

(17) *that wisdom of a saying

The intended interpretation of such examples would be something like 'a doctor who is enthusiastic about jazz', 'a fragrant breeze', or 'a problematic decision', 'a wise saying' etc., similarly to (14) which is interpreted as 'a doctor who is idiotic'. However, the examples are ungrammatical; this sort of meaning cannot be expressed in the shape of an *N of an N* construction with these nouns occupying the first slot. This is so in spite of the fact that the examples contain nouns which come out as gradable according to almost all other gradability tests reviewed in chapter 1, such as modification by degree adjectives (cf. (11)). As for (17), it could be objected that mass nouns generally cannot occur as N_1 in *N of an N* constructions and this is what rules out the example. However, mass nouns can undergo a mass-to-count shift associated with a change in meaning from designating the property to a concrete instantiation of it, i.e. denoting an individual which is characterized by the respective property. Following such a shift, some originally mass nouns can occur as N_1, as

illustrated in (18), which is interpreted as 'a beautiful {boat/ performance}' (cf. also Hulk and Tellier 2000 for French):[54]

(18) a beauty of a {boat/ performance}

For some reason, though, this does not seem possible in (17). Moreover, this still does not explain the unacceptability of the other examples given above.

Having suggested that gradability is not sufficient for a noun to occur as N_1, we will now show that it is not necessary either. This can be seen from the fact that N_1 need not be gradable. Consider the following examples:

(19) a. a box of a house
b. a stealth submarine of a car
c. that balloon of a {head/ bridal gown/ building}
d. that tower of a {song/ burger/ cake/ man}

These examples do not receive a (high) degree interpretation, as predicted by a degree approach such as Matushansky (2002c) (cf. §2.2.1). (19)a, for example, is not about a house which is 'a box to a high degree', or one which is 'very box-like'. In all these examples the N_2 is somehow qualified by metaphorically being compared to N_1. We will shortly make more precise what the exact contribution of the N_1 in such examples is. First though, let us mention one more fact which suggests that these nouns are not gradable. This consists of their failure to pass other gradability tests. For instance, they cannot sustain modification by adjectives like *big* in a degree sense as shown in (20)-(21). *Big* can only receive a concrete, size interpretation, not a degree one, and the nouns do not receive the interpretation they get in (19). These examples are not about being a box, submarine etc. to a high degree or about being very box-like, submarine-like etc.; they are simply about boxes, submarines, etc. which are large in size. As such, the examples in (21), which would require a figurative interpretation of the nouns, are not acceptable.[55]

(20) a. a big box
b. a big stealth submarine
c. a big balloon
d. a big tower

(21) a. #This house is a big box.

---

[54] Note however that the gradability of these nouns in fact becomes questionable when they are used in the N_1 position. This can be seen from the fact that, although these nouns are gradable when shifted to the count interpretation too, when used in the N_1 position, modification by adjectives such as *big* does not contribute a degree interpretation in relation to N_1. Instead, such adjectives are interpreted literally, i.e. in terms of size, with respect to N_2:

(i)	that	big	beauty	of a boat	[big boat]
(ii)	une	énorme	saleté	de moustique	[a big mosquito]
	an	enormous	filth	of mosquito	
	'a huge filthy mosquito'				

[55] Modification by size adjectives like *big* will be examined in more detail in chapter 4 (section 2); an explanation for these facts will be proposed there.

b. #This car is a big submarine.
c. #{His head/ That building} is a big balloon.
d. #{That song/ burger} is a big tower.

Based on the evidence presented thus far, we can conclude that gradability is neither sufficient nor necessary for a noun to occur in the N_1 position of the *N of an N* construction. In what follows, we will show that it is the expression of a value judgment that is the sufficient and necessary condition for N_1.

Upon closer consideration of the grammatical examples above, it can be observed that what they all share is the expression of a value judgment. The examples in (19) in particular attest to the fact that the expression of a value judgment is sufficient for a noun to occur as N_1. As already demonstrated, none of the nouns in these examples is gradable; they all, however, clearly convey some sort of value judgment, either positive or negative. Take (19)a, for instance: the qualification of a house in terms of a box – whether understood with respect to size or shape – conveys a negative value judgment (unless one can come up with a scenario in which looking like a box would be desirable so that *that box of a house* could acquire a positive, appreciative value). The presence of this type of interpretation is enough to make the examples grammatical. This is particularly clear with nouns that lose (all or most of) their lexical content and only end up expressing a general positive or negative value judgment. Consider the examples in (22) below (most of them taken or adapted from Napoli 1989):

(22) a. a pearl of a sister
b. one hell of a story
c. a flower of a girl
d. a peach of a day

In (22)a, for instance, the speaker is expressing a general positive value judgment of Maria as a sister of lovely or valued qualities (similar to 'a sister as lovely as a pearl') (Napoli 1989: 229).

Similar facts are found in other Germanic and Romance languages. Consider, for instance, the following Dutch and French examples:[56]

(23) a. een dijk van een {huis/ salaris} [Dutch]
a dike of a house/ salary
'a hell of a house/ salary'
b. een dijk van een {vrouw/ film/ idee}
a dike of a woman/ movie/ idea
'a hell of a woman/ movie/ idea'

(24) a. ce bijou d'église [French]
this jewel of.church
'this jewel of a church'

[56] The examples in (24) are from Doetjes and Rooryck (2003).

b. ce bijou de Marie
this jewel of Mary
'this jewel of a Mary'

In (23)a, *dijk* seems to retain some of its lexical content, so that an interpretation in terms of a (positive) evaluation based on some concrete properties (e.g. size) can be obtained, resulting in a meaning similar to *massive*. In (23)b, however, *dijk* only expresses a general, extremely positive value judgment, similarly to *fantastic*. In other words, it seems to have lost all of its other semantic features, i.e. no specific properties related to being a *dijk* are retained, or in any way relevant, for the interpretation.[57] (This type of interpretation in terms of a general positive value judgment is also available in (23)a). As for the French examples, as pointed out by Doetjes and Rooryck (2003:280), while (24)a can be paraphrased in terms of a comparison ('the quality of the church is such that it resembles a jewel') where *bijou* retains part of its lexical meaning, for (24)b it is hard to maintain that 'Marie is like a jewel' without losing the lexical interpretation of *bijou* 'jewel'. A qualitative comparison between animate and inanimate entities is much harder to interpret as a true comparison. Thus, the use of *bijou* 'jewel' here only involves a highly positive value judgment of Marie.[58]

Recall also, in this context, the examples in (7)-(9), repeated here for convenience: they host in the N_1 slot expressions that clearly only make an expressive, affective contribution:[59]

(7) that devil of a child [English]

(8) a. cette sapristi de femme [French]
this good.grief of woman
'this damned woman'
b. ce diable de moteur
this devil of engine
'this wretched engine'

(9) een kei van een meid [Dutch]
a cobble of a girl
'a fantastic girl'

[57] This is also unlike the way metaphors are generally conceived to work (cf. Henry 1971, Lakoff and Johnson 1980, Lakoff 1990, 1994, 1996; for a different type of approach to metaphor, see Recanati 2003, Romero and Soria 2007 a.o.).

[58] Interestingly, the expressions that occupy the N_1 slot in some of the examples in this sub-section cannot be used in this way outside of the *N of an N* construction, e.g. in predicate position, sometimes not even with *such*, which can otherwise be used with nouns under a figurative interpretation (see chapter 1, §2.1.2). This is the case for the Dutch noun *dijk*, as well as some of the English nouns (e.g. *peach* – ??*The day was (such) a peach.*; *hell* - ??**That story was {(such) a/ one} hell*.). This suggests that the sort of interpretation found is not simply exploited in the *N of an N* construction, but actually created in this environment.

Note also that *sapristi* cannot be used predicatively at all, as pointed out by Hulk and Tellier (2000) and Doetjes and Rooryck (2003), who even question its status as a noun.

[59] The examples in (20)-(21) have demonstrated that the nouns in (19) are not gradable; the facts are completely parallel concerning the nouns used in the other examples, i.e. (22)-(24), as well as (7)-(9).

The facts discussed so far make it clear that the expression of a value judgment is sufficient for a noun to occur as N_1. It remains to be shown that this is also a necessary condition.

To start with, recall, for instance, the examples in (15) above, repeated here for convenience:

(15) a. ??* that (jazz-)enthusiast of a doctor
b. *that eater of a doctor

These examples, which contain gradable nouns, are ungrammatical unless we can construe a possibly figurative, metaphorical meaning under which the nouns could be interpreted as conveying some sort of value judgment. While for a noun like *eater* it is not easy to construe such an interpretation, other agentive *–er* nouns are more likely to have such uses; even for *eater* such epithet uses may be coined in compounds, as illustrated below:

(25) a. that {dancer/ performer} of a politician
b. that man-eater of a woman

Likewise, the examples in (16), partly repeated below, can be contrasted with the examples in (26):

(16) a. *that problem of a decision
b. *that success of an attorney

(26) a. that mistake of a relationship/ child
b. a failure of an attorney

What makes the difference between the grammatical examples in (26) and the ungrammatical ones in (16) above is that the nouns in (26) have a judgmental value, which is clearly negative in connotation; this is lacking in (16). While this is quite straightforward in the case of (16)b vs. (26)b, the nouns *problem* and *mistake* in (16)a and (26)a seem to be quite similar at first sight and would not be expected to behave very differently. However, we would like to suggest that the contrast between (16)a and (26)a can be explained by the fact that *problem*, unlike *mistake*, does not necessarily have a negative judgmental connotation. *Problem* is more objective, and can be used to simply make a factual observation (similar to *challenge*), while *mistake* is generally felt as making a rather negative comment. Note also, in this context, the difference in interpretation when a (positive) evaluative adjective is used to modify the two nouns, as in *a nice/ fascinating problem* and *a nice/ fascinating mistake*. In the former case we are referring to something which presents us with a challenge, but which is, at the same time, intriguing, fascinating (in terms of its contents, the implications, the quest for a solution etc.). In the latter case, we are referring to a mistake, and the adjective is speaker-oriented, in the sense that it conveys the speaker's attitude, possibly ironic (in fact exclusively so with *nice*), rather than describing the intrinsic qualities of the

object. In sum, the former can be used in a positive sense, while the latter retains a negative flavour coming from the choice of noun.

The facts illustrated in (26) also point up another problem for a gradability approach to *N of an N* constructions, such as the one put forth by Matushansky (2002c) who assumes that the structure involves a degree operator. Recall from §2.2.1 that, while Matushansky expresses the intuition that these constructions also involve an emotive dimension of meaning, she in fact reduces the entire phenomenon to the presence of a (special) degree operator in the syntactic structure. This would predict that occurrence in this position should always trigger a high degree interpretation of N_1, given the contribution of the degree operator. This is, however, not the case. The sentences in (26) above, for example, are not about an attorney who is 'a failure to a high degree', or a relationship/ child that is a 'high degree mistake'. Instead, the attorney is judged as a failed one/ a failure, and the relationship as being a mistake, and these qualifications carry a particular (here: negative) value judgment. The same holds, in fact, for all the examples considered so far.

More data clearly indicating that it is the expression of value judgment that is the essence of the interpretation of N_1s comes from Villalba and Bartra-Kaufmann's (2010) discussion of Spanish *N of an N* constructions. They take it to be a lexically encoded, and hence highly idiosyncratic, property of the nominal. Typical instances involve negative evaluative nominals like *idiota* 'idiot', *bruja* 'witch', *gilipollas* 'asshole', *burro* 'silly' (lit. 'donkey'), whereas non-evaluative nouns like *médico* 'doctor' or *político* 'politician' are forbidden. Crucially, when a deprecatory morphological marker like *-ucho* or *-astro* is added, the *N of an N* construction becomes perfect:[60,61]

(27) a. #el {médico/ político} de tu hermano [Spanish]
the doctor/ politician of your brother
b. el {medicucho/ politicastro} de tu hermano
the bad.doctor/ bad.politician of your brother
'that disaster of a doctor that your brother is'

So far, we have shown that the expression of a value judgment is the sufficient and necessary condition for a non-modified noun to occur as N_1. In what follows we will show that when N_1 is modified, the effect of the modifier (i.e. adjective) on the acceptability of the [A N] in the first slot of the *N of an N* construction depends on the same aspect of meaning, i.e. whether it can convey a value judgment.

[60] Villalba and Bartra-Kaufmann (2010) also note that the contrast has nothing to do with gradability, as neither nominal is gradable:
(i) *Juan es muy {médico / medicucho}.
John is very {a doctor/ bad.doctor}.

[61] The examples in (27) are from Villalba and Bartra-Kaufmann (2010).

2.3.3 Insertion of adjectives in the first position: *[A (N_1)] of N_2*

The preceding sub-section has shown that a noun can only be used in the first position of the *N of an N* construction if it can express a (positive or negative) value judgment; this is the necessary and sufficient condition. We will now show that this conclusion is confirmed by an examination of cases where a noun is modified in the N_1 position, or when an adjective is used on its own in the first slot of the construction.

To start with, compare the following examples:

(28) a. *that eater of a doctor
b. that huge eater of a doctor

The contrast between the two examples suggests that modification can license a noun as N_1 that otherwise would not be able to occur in this position. The question is: what is the decisive contribution of the adjective: that it is gradable or that it contributes a value judgment? Just like in the previous sub-section, we need to tease the two apart in order to see which one is the sufficient and necessary condition for an adjective to be able to license a noun in the N_1 position.

First of all, we will show that gradability is not sufficient. This can be seen from the fact that simply adding a gradable adjective does not automatically license a noun as N_1, as shown by (30) in comparison with (29). The fact that these are gradable adjectives is indicated by the availability of degree modification in (31).

(29) a. *that eater of a doctor
b. *a duck of a president
c. *that problem of a {decision/ financial crisis}

(30) a. ?that big eater of a doctor
b. *a/that friendly duck of a president
c. *that interesting problem of a {decision/ financial crisis}

(31) a. a very big eater
b. very friendly
c. a very interesting problem

On the other hand, gradability is not necessary. This is shown by cases of modification by affective, or expressive, adjectives (e.g. English *damned* etc., French *foutu*, *sacré*, *fameux*, *beau*, *pauvre* etc., but also *prétendu*, *soi-disant*). Such adjectives can license as N_1 nouns that otherwise would not be able to occur in this position, as shown by the contrast between (32) and (33), although they are not gradable, as shown again in (34) below:[62]

(32) a. *that democrat of a mayor [English]

[62] The examples in (33) are taken or adapted from, or inspired by, Ruwet (1982).

b. *ce linguiste de Noam [French]
this linguist of Noam
b'. *ce {démocrate/ médecin} de Paul
this democrat/ doctor of Paul

(33) a. that damned democrat of a mayor [English]
b. ce sacré linguiste de Noam [French]
this bloody linguist of Noam
'this bloody linguist of a Noam'
b'. ce prétendu {démocrate/ médecin} de Paul
this pretended democrat/ doctor of Paul
'this pretended democrat/ doctor of a Paul'

(34) a. *a very damned democrat [English]
b. *le plus sacré linguiste [French]
the most bloody linguist
b'. *un très prétendu {démocrate/ médecin}
a very pretended democrat/ doctor

In what follows, we will show that the expression of a value judgment is the sufficient and necessary condition. That it is sufficient can already be seen from the acceptability of "affective" adjectives in (33). These adjectives are not gradable. They only express the speaker's attitude. So it is due to this particular semantics that they can license nouns which may be completely neutral in terms of value judgments and would otherwise be barred from the N_1 position (e.g. *democrat*, *linguist*, *doctor* etc.): the [A N] combination will be interpreted as a whole as conveying a value judgment, namely a depreciatory one. The examples in (35) illustrate similar cases, where the adjectives contribute a negative attitude (e.g. despise):[63]

(35) a. a lame duck of a president
b. a {sorry/ lame /poor} excuse of a man

Finally, if an adjective can be interpreted as expressing a value judgment (possibly in addition to being gradable), then it can also license a noun as N_1. This is in fact the case for (28)b above, which is to be contrasted with (30)a.[64] Conversely, if such a value-judgmental interpretation is missing, as in (30) above, the examples are not acceptable.[65] This shows that the expression of a value judgment is necessary.

[63] Example (35)a is from Napoli (1989).

[64] Such adjectives seem to be "emotive" adjectives (cf. Vendler 1968 who classifies adjectives like *horrible*, *awful*, *delightful* etc. as "emotive" adjectives, and notes that other adjectives, like *beautiful*, *lovely* as well as *ugly*, *dirty* etc. may also carry an emotive load), or "evaluating" (or quality) adjectives (cf. Cinque 1994, Hetzron 1978; e.g. English *beautiful*, French *joli*), or adjectives expressing "subjective comment" (cf. Scott 1998, 2002; e.g. *nasty*, *magnificent*, *beautiful*, *great*, *excellent* etc.). These adjectives seem to be (a subset of the class of) evaluative adjectives distinguished by Bierwisch (1989), or "extreme" adjectives (cf. Cruse 1986, Paradis 2001, Morzycki 2010).

[65] A treatment of such adjectives as degree modifiers of the gradable nouns (a view suggested in chapter 1, and to be examined more seriously in chapter 4) would also raise a problem for a (high) degree analysis of *N of an N* constructions (such as Matushansky 2002c): the fact that adding a degree modifier improves

In sum, the investigation of modified N_1s has shown that, when an adjective can license a noun in this position, which otherwise would not be able to occur here, the sufficient and necessary condition for it to do so is, once again, the expression of a value judgment, not gradability.

Additional evidence that supports this conclusion comes from a related structure, where the first slot is only occupied by an adjective, i.e. *A of N* constructions. These are not found in English, but they exist in Romance languages, e.g. Romanian and Spanish (especially when N_2 is a proper name or a personal pronoun). Consider the following examples:

(36) a. ??înaltul de Petre [Romanian]
tall.the of Peter
b. ??slabul de Petre
thin.the of Peter

(37) a. săracul de {mine / Petre} [Romanian]
poor.the of me / Peter
'poor me / poor Peter'
b. pobrecitos de nosotros [Spanish]
poor of us
'poor us'

On the one hand, the first series of examples contain clearly gradable adjectives (like *înalt* 'tall', and *slab* 'thin'), but are not acceptable, thus showing that gradability is not sufficient for an adjective to occur in this position. On the other hand, the acceptability of (non-predicative) adjectives like *poor*, which are not gradable, in (37) shows that gradability is not necessary. These examples also show that the expression of a value judgment, or speaker attitude, however, is a sufficient condition, since this is what the meaning of these adjectives only consists of. That this is also a necessary condition is shown by the fact that if, possibly in addition to being gradable, an adjective can also convey such a (subjective) value judgment, then it may occur in the construction. Contrast, for example, the ungrammaticality of the (dimensional) adjectives *înalt* 'tall' and *slab* 'thin', which tend to be rather neutral, in (36) above, with the grammaticality of the corresponding words derived by means of an augmentative suffix, namely *înăltan* 'very tall (person)' and *slăbănog* 'very skinny (person)':

(38) a. înăltanul de Petre [Romanian]
tall.AUG.the of Peter
'that really tall Peter'
b. slăbănogul de Petre
thin.AUG.the of Peter
'that really skinny Peter'

---

the examples is unexpected in such an analysis where a (high) degree projection is assumed to be present in the structure in all cases.

The difference between (36) and (38) lies in the contribution of the augmentative suffix, which adds a negative connotation, plausibly related to the idea of an (undesirable) excess in height etc. as compared to some average or standard (in fact *înăltan* or *slăbănog* may be used to indicate that the individual is '*too much* taller/ skinnier than would be normal').[66] The ungrammatical examples in (36) above can also be contrasted with the acceptable example in (39) below, which contains the adjective *gras* 'fat', which expresses a property that is conventionally regarded as rather negative; the presence of this negative connotation (which is absent in (36)) licenses the use of the adjective in the first slot of the construction:

(39) grasul de Petre [Romanian]
fat.the of Peter
'that fat Peter'

All these examples show that what makes the difference between acceptable and unacceptable examples of *A of N* constructions, in those languages where such structures exist, is the presence vs. absence of an interpretation in terms of value judgment. Gradability does not play a role. This confirms the conclusion that the ability to convey a value judgment is the sufficient and necessary condition for an expression to occur in the first position of these constructions.

2.3.4 Final remarks on the interpretation of N_1

It has been shown in the preceding sub-sections that the essence of the *N of an N* construction is the expression of a value judgment. As such, possible N_1s are those nouns that have or can acquire such an interpretation. The value judgment may be inherent in the meaning of the noun, i.e. some nouns (whether gradable or not) make a value judgment easily available due to their inherent, lexical meaning. Such an example is *idiot* which categorizes individuals based on the (gradable) property idiocy, which is an intrinsically negative quality, hence the negative value judgment this noun is associated with by definition. Another example is provided by *tyran* 'tyrant', which, as shown Ruwet (1982), can be used as N_1 both with a metaphorical interpretation and a non-metaphorical one:

(40) a. Ce tyran de Hiéron terrorisait Syracuse. [French]
this tyrant of Hieron terrorised Syracuse
'This tyrant Heron terrorised Syracuse.'

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[66] Note that a similar contrast is found in Italian, where neutral agentive nouns like *mangiatore* 'eater' do not like to appear as N_1 (unless they are modified), while the nouns derived from the same verb by means of the augmentative suffix (e.g. *mangione* 'big eater') do:

(i) a. ??/*questo mangiatore di Gianni
this eater of Gianni
b. questo mangione di Gianni
this eater.AUG of Gianni
'this huge eater (of a) Gianni'

And recall also the Spanish examples in (27).

b. Ce tyran de Paul terrorise sa famille.
this tyrant of Paul terrorises his family
'This tyrannical Paul terrorises his family.'

If a value judgment is not inherent in the meaning of the noun, as in the case of basically neutral nouns the lexical meaning of which involves no value judgment, such as *schoolmaster*, *box, doctor* etc., it may come about by means of modification (by e.g. affective adjectives – cf. (33), (35)), by adding an evaluative suffix (as in the Spanish examples in (27)), or as the result of a shift in meaning, usually by "metaphorical extension or association" (cf. Ruwet 1982, Napoli 1989) (e.g. (19), (22)-(25)).

Some supplementary observations may be added that further support the conclusion that what is necessary is for N_1s to be able to express a value judgment, as well as showing other aspects correlated with this sort of interpretation. First, as pointed out by Napoli (1989), those inanimate objects which are colloquially used with the sense of a value judgment can appear in the N_1 position, while the names of inanimate objects which are typically used for specific purposes are not generally employed with such an interpretation and are, therefore, also barred from the N_1 position. This is illustrated for Italian and English by the contrast between the (a) and (b) examples below (with the exception of (41)a', the examples are from Napoli 1989):

(41) a. un fiore di ragazza [Italian]
a flower of girl
'a flower of a girl'
a'. un capolavoro di quadro
a masterpiece of painting
'a masterpiece of a painting'
b. *un tulipano di ragazza
a tulip of girl
'*a tulip of a girl'
b'. *un quadro d'opera d'arte
a painting of work of art
'*a painting of a work of art'

(42) a. a pistol of a lecturer
b. *a revolver of a lecturer

Similarly, proper names (and pronouns) cannot occur as N_1 in these constructions precisely because they cannot be used to convey value judgments. The only exception are proper names that by connotation have become evaluative in this sense (Napoli 1989):

(43) a. *quello Carlo d'uomo
that Carlo of.man
'*that Charles of a man'

b. un Hitler d'uomo
a Hitler of.man
'a Hitler of a man'

In addition, as Villalba and Bartra-Kaufmann (2010) remark, what counts as a proper expression of value judgment has a cultural conditioning. They note, in this sense, the contrast between the masculine *brujo* 'wizard' and the feminine *bruja* 'witch', illustrated below. Whereas the latter is easily and frequently used in *N of an N* constructions, the former is awkward (and unattested), because of the fact that it has no pragmatically attributable negative interpretation:

(44) a. la bruja de mi suegra [Spanish]
the witch of my mother-in-law
'that witch of a mother-in-law of mine'
b. #el brujo de mi suegro
the wizard of my father-in-law

Moreover, speaker-variation can sometimes be observed in correlation with the availability of an interpretation in terms of value judgment. Napoli (1989) notes that while in many cases the value judgment is inherent in the word for all speakers (as in most of the examples above), sometimes speakers will vary, which influences the acceptability of the example. Consider (45) below, for which Napoli reports variation that she puts down to the fact that "for many speakers the word *sexist* is not (yet) inherently evaluative" (p. 224):

(45) a sexist of a director

Another interesting property of the interpretation of N_1s in *N of an N* constructions is the fact that it varies depending on the choice of N_2. This could already be seen in the variable interpretation of the N_1s in the Dutch and French examples in (23)-(24) above. More examples illustrating this point are given below for English:

(46) a. a cupboard of a house
b. a cupboard of a man

(47) a. a whale of a time
b. a whale of a lesson
c. a whale of a tale
d. a whale of a bug
e. a great white whale of a hotel
f. a whale of a problem
g. a whale of a mystery
h. a whale of a woman

It can be observed that the exact relevant properties that make up the basis for the value judgment may differ for the same N_1 with different N_2s. In (46)a what is relevant is size (namely, insufficient or small, and possibly crammed, space), while in (46)b it is shape, and, possibly, also (large) size. In (47) it can be shape, size, quality etc. What stays constant throughout, however, is that the *N of an N* conveys a negative or positive value judgment, with a greater or lesser emotive load.

Note that these facts constitute a problem for a degree approach, which would take such figurative meanings to be the result of scalarity coercion triggered by the presence of a degree operator. According to Matushansky (2002c), as a result of scalarity coercion the nouns would come to express properties typically associated with being N, with the notions of stereotype or prototype coming into play. It is not obvious, however, how, for the same N_1, it could yield a different output depending on the choice of N_2. In addition, it is also sometimes rather hard to determine the relevant properties that would be "*stereotypically* associated with being N_1"; this can be seen in the case of *cupboard* in (46) or *peach* in (22)d – *a peach of a day*. Prototypicality does not seem to play a role here either. Moreover, in some cases, there is a strong connotational value. Take (47)e for instance: *white whale* is an allusion to Moby Dick, hence, we are not simply dealing with a big hotel, but with one that is unmanageable etc.; someone without knowledge of the relevant fiction, however, would not be able to interpret the example in this way, and would probably only get a size + colour qualification out of it. In sum, the dependence of the resulting interpretation of N_1 on the choice of N_2 is hard to capture on such an approach. It is also, in fact, rather unexpected given that scalarity coercion is supposed to be triggered by the presence of a degree operator that combines with N_1, and then the [Deg + N_1] as a whole acts as a predicate or as a modifier of the N_2 (depending on the analysis one adopts). Finally, note that the cases where N_1 loses all of its lexical semantic content, and ends up expressing only a very general positive or negative value judgment (recall examples (22)-(24), as well as (7)-(9)) also present a problem for such a degree account since there is no property related to being N_1 which can be identified.

Before concluding the section, we would like to add a note on the source of the confusion sometimes found in the literature between "evaluation", defined as the expression of a value judgment, and degree. In our view, the confusion stems from the fact that, although the expression of a value judgment and gradability are distinct, they are intersecting notions, in the sense that there are expressions which are gradable as well as expressing a value judgment (e.g. *idiot*). If one chooses examples containing such expressions in the first slot of the *N of an N* construction, it is not easy to pinpoint which is the relevant factor enabling the expression to occur in this position. In addition, it is likely that what has been confused is the (possibly varying) strength of appreciation or depreciation carried by the "value-judgmental" expression and the high degree of a property the respective expression denotes or is associated with. This is because strong appreciation or depreciation and high degree may be associated by inference – though such implications are not necessary. Thus, an expression of high degree, such as *very beautiful* or *very stupid* or even *very/ extremely tall*, to take simple examples from the adjectival domain, may implicate,

or be associated with, a strongly positive or negative value judgment.[67] Conversely, a strong judgmental expression may be understood in the sense that property holds to a high degree. For example, the use of an evaluative vocative such as *that idiot!* may be interpreted as implying that (the speaker thinks that) the individual in question is 'very idiotic'. In other words, the strength of speaker involvement as suggested by the use of a value judgmental expression may be taken to reflect the degree to which the property expressed applies.

2.4 Concluding remarks

The investigation carried out in this section has yielded two main findings.

First of all, it was shown that "evaluation", understood as the expression of a value judgment, and (pure) gradability, understood as referring to the possibly varying degrees to which a property may hold, can and should be distinguished. This can be done in spite of the fact that the classes of expressions they delimit intersect to some extent, in the sense that there are expressions which are gradable and may express a value judgment at the same time (e.g. *idiot*). This is significant as it fills a gap in the literature on the topic of *N of an N* constructions, which had led to some confusion in the characterization of the *N of an N* construction.

Secondly, once this distinction has been established, the exact requirement on the first slot of the *N of an N* construction can be identified. It has been shown that possible N_1s must be expressions that lend themselves to being interpreted as expressing a value judgment (usually negative, but not exclusively so), irrespective of whether they are gradable or not. In other words, the expression of a value judgment is the necessary and sufficient condition on N_1, while (pure) gradability is neither sufficient nor necessary.

Consequently, occurrence in the N_1 slot of the *N of an N* construction cannot be used as a test for nominal gradability. This is rather an environment where expressive/emotive evaluative meanings are exploited or even created.

3 *Seem*

3.1 Introduction

The second case we examine in this chapter is the distribution of expressions in the non-sentential (i.e. small clause) complement of *seem* in English. As discussed in chapter 1, it has been claimed in the literature that only gradable expressions can be used in this environment (Bolinger 1972, Maling 1983). Matushansky (2002b), however, shows that the facts are more complicated and argues that semantic

[67] For a discussion of expressives and their possibly varying degree of expressivity, or strength see, for example, Potts (2007).

selection alone (i.e. lexical gradability) cannot account for the restrictions that are found. Instead, she proposes a syntactic degree account, claiming that *seem* requires the presence of a DegP in its small clause complement in the syntax.

The main consequence of such an account, which requires the presence of a DegP, is that the small clause complement of *seem* will have to contain either a gradable noun or a noun modified by a gradable adjective, since these are the types of elements that are assumed to project a DegP in the syntax in Matushansky's account.[68] Alternatively, it will have to contain a noun or adjective that has become gradable by means of scalarity coercion triggered by the presence of a (covert or overt) degree operator.

In this section, we will re-examine (the core idea of) Matushansky's syntactic degree account in light of some additional empirical facts and show that her proposal cannot account for (all) the data or makes the wrong predictions. This will lead us to suggest an alternative way of capturing the restrictions on the small clause complement of *seem* in which gradability, either lexical semantic or syntactic, does not play a role.

3.2 The syntactic degree account and its problems

3.2.1 Introducing the syntactic degree account

The following examples illustrate the basic contrasts, presented in chapter 1, which led to the claim that only gradable nouns and adjectives are acceptable in the non-sentential complement of *seem*, as in (48), while non-gradable ones are not, as in (49) (cf. Bolinger 1972, Maling 1983):

(48) a. Eric seems a fool. [NP]
a'. What he writes seems nonsense.
b. The music seems beautiful. [AP]
b'. His nationality seems irrelevant.

(49) a. *Eric seems a {man/ wizard/ doctor/ dancer}. [NP]
a'. *What he writes seems history.
b. *The music seems choral. [AP]
b'. *His nationality seems French.

Matushansky (2002b), however, draws attention to some complications in the data. For example, adding adjectives like *good*, *capable*, *bad* etc. to a non-gradable noun improves the examples in (49)a significantly:

(50) Eric seems a {capable/ good/ lousy/ exceptional} {wizard/ doctor/ dancer}.

[68] Prepositional phrases can also occur in this position, but we will not discuss these cases here.

As also noted by Bolinger (1972), adding a degree modifier to the non-gradable adjectives in (49)b, as well as to nouns, makes them acceptable, as illustrated in (51). In addition, Matushansky observes that comparatives, equatives etc. are possible in the small clause complement of *seem*, as illustrated in (52).[69]

(51) a. The music seems *almost* choral.
a'. Eric seems *exceptionally* French.
b. You'd seem *such* a linguist!

(52) a. Frank Sandow seems (twice) as tall as Lady Karle.
b. She seems more eager to learn than you are.

This is significant since, as a whole, these predicates can no longer be considered gradable. Let us see why. Matushansky adopts a degree-based approach to the semantics and syntax of gradable predicates, which takes them to be of type <*d*, <*e*,*t*>>, and to project a DegP in the syntax (even in the case of the unmarked, positive form, for which a null degree operator is posited). On such an account, at the point of the derivation when *seem* is merged with its complement, the degree argument of the adjective has been bound by the equative, or comparative, operator. No longer having an unsaturated degree argument, it no longer counts as a gradable predicate.

Based on such facts, Matushansky concludes that semantic selection alone cannot account for the restrictions on the small clause complement of *seem*, so a simple lexical gradability approach cannot be maintained. She argues, instead, that it is necessary to separate the underlying (i.e. lexically specified) gradability of the lexical head of a predicate from its syntactic behaviour, hence from the licensing of a predicate in the complement of *seem*. She proposes that what licenses the complements in the examples above is the presence of a DegP in the syntax (e.g. containing the equative or comparative operator).

In Matushansky's syntactic degree account, *seem* is treated as a case of lexical ambiguity: there is an epistemic *seem*, which takes an IP/ CP complement, and a perception *seem*, which takes a small clause complement. The restrictions on the small clause complement of perception *seem* are formulated as a syntactic requirement: "Perception verbs, including the perception *seem*, are lexically specified for an uninterpretable [degree] feature. This feature is checked by (covert) QR of a DegP from its complement." (Matushansky 2002b: 256)

In the next sub-section we will show how Matushanky accounts for the complications in the data that she notes, and point out some problems that arise from the analysis she proposes.

3.2.2 Some problems

In addition to the contrasts illustrated in (50)-(51) above, Matushansky (2002b) points to some more complications in the data. Despite what (50), may suggest, it is

[69] The examples in (51)-(52) are from Bolinger (1972) and Matushansky (2002b).

in fact not the case that simply adding an adjective to a non-gradable noun will automatically improve the examples, as shown by (53), though adding a degree modifier to the adjective does, as illustrated in (54) (examples taken or adapted from Matushansky 2002b):

(53) a. Eric seems a {*French/ *tall/ ??handsome} {wizard/ doctor/ dancer}.
b. ?Eric seems a handsome man.

(54) a. Eric seems an *exceptionally* {French/ handsome}{wizard/ doctor/ dancer}.
b. Eric seems a *more* {French/ handsome} dancer than anyone I have ever met.

Matushansky (rather misleadingly) calls the adjectives in (53)-(54) "dimension" adjectives, and those in (50) above "value" adjectives (which seem to include evaluative adjectives generally interpreted subsectively). "Dimensional" adjectives, unlike "value" ones, require an overt degree operator to license inherently non-gradable DP-complements of *seem*. However, with certain light head nouns or if stressed, they also function as licensers (as in (53)b vs. (53)a); she also notes that examples containing "dimension" adjectives are better than those with nationality ones (compare *French* and *handsome* in (53)a).

These facts raise certain questions, which Matushansky tries to address. We will consider two of them here, and show that the solutions she offers to these problems are unsatisfactory, and raise additional problematic issues that cast doubt on the analysis.

Before considering these issues, we need to introduce two ingredients of Matushansky's account. Firstly, she claims that a degree operator in the complement of *seem* cannot be interpreted in situ and needs to undergo Quantifier Raising (QR). This movement is in fact caused by two factors: (i) there is a type mismatch between the degree operator and its complement (as generally assumed on the quantificational view of degree operators – cf. Heim 2000); (ii) the feature on *seem* needs to be checked. Secondly, she argues that in order to extract an item out of a DP (which is assumed to be a phase), it must first be raised to its periphery, presumably to Spec,DP.

The first question raised by the data above on an account like Matushansky's is: why is it impossible to use the DegP of the adjectives in (53) to license the noun in the complement of *seem*? Her answer is that, for whatever reason, the null degree operator present in (certain classes of) adjectives cannot be raised in the way indicated above. This, however, reveals an inconsistency in the account, since at other points in the paper, and for other contexts, she in fact claims that the degree operator present in the DegP of positive adjectives does generally need to raise for interpretability. In addition, she offers no explanation for the contrast between (53)a and (53)b. The second question then arises: if the default null degree operator of positive adjectives projected within a DP, as in (53), cannot check the uninterpretable feature of *seem*, then (i) why can gradable nouns (for which she assumes a similar syntax-semantics) appear in the complement of *seem*, and (ii) how

come there is a class of adjectives that do not require an (overt) degree operator to license non-gradable DP-complements of *seem*, as in the (50) examples? Her answer, building on Bierwisch (1989), is that "value" adjectives like those in (50) and gradable nouns contain a different kind of degree operator than the null operator proposed for positive "dimension" adjectives such as those in (53). However, the proposed typology of gradable adjectives, namely "dimension" and "value", does not fully match the classifications proposed in the works she refers to, namely Bierwisch (1989). In addition, she does not discuss the actual properties/nature of the special null degree operator postulated for the sub-class of value adjectives and its interaction with or relation to the null degree operator postulated for the positive form of gradable adjectives in general.

Having pointed out these problematic aspects of the analysis proposed by Matushansky (2002b), we will, in the remainder of this section, mostly abstract away from other details concerning the particular technical implementation, and will mainly focus on the core idea of the proposal and its predictions in the light of some additional empirical facts.

3.2.3 Measure phrases

Matushansky (2002b) points out that adjectives modified by measure phrases (henceforth MP), as in (55), are not possible in the small clause complement of *seem*. But when a MP contains its own degree operator such as *almost*, *about* etc., as in (56), it becomes possible (all examples below are from Matushnsky 2002b):

(55) a. *Frank Sandow seems 5'10" tall.
b. *Thumbelina seems two inches tall.
c. *Mount Everest seems {8848 m/ 8.8 km/ 29,028 feet} high.

(56) a. Frank Sandow seems {almost/ about} 5'10" tall.
b. Thumbelina seems about two inches tall.

Based on these contrasts, she argues that adjectives modified by MPs are "absolute" predicates, i.e. they are not gradable. Therefore, their syntax does not involve a DegP projection, and they are, consequently, barred from the small clause complements of *seem*. When a degree operator is present, however, as in (56), it licenses the entire AP in the complement of *seem* (even if the degree operator is actually embedded in the specifier of AP). This effect is similar to the influence of explicit scalarity coercion in other contexts, e.g. APs and DPs – recall the examples in (51) and (54), where adding a degree modifier licenses an adjective or noun which could otherwise not appear in the small clause.

These facts, however, may also be taken to support an alternative, vagueness-based, view. Such a view would link the ungrammaticality of (55) to the fact that the precision of the measure phrases used is too high for the embedded proposition to be epistemically or perceptually at issue. This would amount to treating *seem* similarly

to the *seem* of other languages (e.g. Modern Italian *sembrare*),[70] which imposes no gradability restriction on its complement. In these languages or dialects *sembrare*/*seem* means 'it can be deduced from perceptual evidence that P holds'. The constraint then becomes a pragmatic one of perceptual or epistemic uncertainty.

But Matushansky rejects this view, on the basis of two arguments. Firstly, she points out that using smaller, larger or different units of measurement, as in (55)c, or even a vague plural, as in (57) below, which should have influenced the grammaticality if it truly relied on precision of perception, has no effect. Secondly, measure phrases used as part of a comparative are grammatical in the complement of *seem* as in (58) (both examples are from Matushansky 2002b).

(57) *Mount Everest seems thousands of meters high.

(58) Thumbelina seems two inches taller than expected.

She uses this as evidence in favour of her view that in the case of adjectives modified by MPs no DegP is projected. They will, therefore, not make good small clause complements to *seem*. In cases like (58), however, there is a DegP hosting the comparative, and the whole phrase can be licensed as a complement.

We would like, however, to raise some objections to Matushansky's arguments. First of all, her judgment of the example in (57) is questionable: speakers we have consulted as well as internet and corpus searches show that such examples are in fact acceptable:

(59) a. It seems years to me since I have seen you.[71]
b. A place where the hustle and bustle of city life seems thousands of miles away.[72]
c. But as they sit here, they seem a million miles from their tranquil Northwich base.[73]

More in general, in fact, it is not completely correct to say that adjectives modified by MPs are not allowed in the complement of *seem*.[74] We do find such examples, as illustrated below. Interestingly, they get an interpretation of the type 'X seems very *A*' or '(much) *A*-er than it/he/she (really) is':

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[70] Or the *seem* of other dialects such as Victorian English, written media English according to Matushansky (2002b).

[71] Source: http://www.classicreader.com/book/2438/1/

[72] Source: http://www.atlasdowel.com/pages/blog/

[73] Source: British National Corpus

[74] As already indicated, Matushansky (2002b) excludes MP modification from the domain of gradability, and argues that no DegP is projected in these cases; hence such expressions are barred from the small clause complement of *seem*, contrary to fact as can be seen from the examples in the main text.

In other works on the syntax and semantics of gradable adjectives and MP modification, however, it has been argued that MPs are in fact hosted within degree projections – cf. Kennedy 1999a, Kennedy & Svenonius (2006). Adopting such a view of the syntax of MPs would still not be able to rescue a syntactic degree approach to *seem*, since, if all MPs were to involve a DegP, then all examples should be equally grammatical (or ungrammatical), which is not the case either.

(60) a. O'Callaghan is that rare actor who seems ten feet tall on stage; his sublimely talented, effervescent performance is reason enough to see the show…[75]
b. She's got a stride that seems 60 feet long. It's effortless.[76]
c. The table seems 20 feet long. There is no eye contact between them.[77]

The interpretation, and hence acceptability, of such examples seems to be facilitated by certain factors. One is expressing or implying a contrast between appearance (wrong or false impression) and reality (real dimensions), as in (61). Another is turning the predicate into a stage-level one, or one that is otherwise relativized or can be evaluated with respect to different times and/or locations (e.g. by the addition of temporal adverbs), as in (62).

(61) a. Notice how the front of the van distorts into a circle and seems 20 feet long.
b. Although he is only five and a half feet tall, when he shares his thoughts his face becomes animated, his arms start moving about and he seems seven feet tall, larger than life.[78]
c. She is standing on a small pedestal hidden under her gown and seems eight feet tall.[79]
d. … she was so polite and so short, about five foot three, nothing like her character here, who seems twelve feet tall and so powerful![80]
e. Also, the dust jacket on my edition features a painting by T. Thompson in which the proportions are all wrong and the boat seems 100 feet long, not 72.[81]

(62) a. For a guy who seems 100 feet tall when he's fighting, I could not believe how short Wanderlei Silva was in person.[82]
b. He seems ten feet tall at points and I think that is really how you would feel if you came face to face with him.[83]
c. Sister G is only four feet, ten inches tall. But sometimes she seems six feet tall as this reporter soon discovered.[84]

These may all be regarded as means of introducing some relativization with respect to different times or possible worlds, which creates room for imprecision and epistemic uncertainty. We would like to suggest that this is what makes them compatible with the meaning of *seem*, which encodes epistemic uncertainty.

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75 Source: http://www.johnnyocallaghan.com/press.htm
76 Source: http://www.bloodhorse.com/…articles/30050/wilson-can-put-stamp-on-big-woodbine-meet
77 Source: http://www.mnblue.com/laurie+coleman+edited+into+her+husbands+ad
78 Source: http://www.mindfulhealthinstitute.com/Pillars_Mindful_Health.htm
79 Source: http://www.scribd.com/doc/13651346/The-EightFoot-Bride-an-original-screenplay
80 Source: http://www.amazon.com/.../product-reviews/B002ZG4Q5W?pageNumber=20
81 Source: http://www.amazon.ca/product-reviews/0393046133
82 Source: http://communities.canada.com/saskatoonstarphoenix/print.aspx?postid=279055
83 Source: http://reversethieves.com/2008/07/21/batman-gotham-knight-pow-splat-kerplop-flurb/
84 Source: http://www.mcintoshwriting.com/portliferow/ABOUT_US/SisterG.htm

Still, there is indeed a contrast between the two following examples that needs to be accounted for:[85]

(63) a. *John seems 5 foot 8 tall.
b. John seems two inches taller than his brother.

In view of the grammaticality of the examples in (59)-(62) above and the sort of interpretation associated with them, we can in fact maintain that (63)a is indeed out due to the precision of the measure, just like Matushansky's examples given in (55) above, for that matter. As for (63)b, it is likely that the comparative has scope over the measure phrase, and, since comparatives are generally allowed in the complement of *seem*, this example is (not unexpectedly) also grammatical; it is (the meaning of) the comparative that is primarily visible, and not the MP differential. Admittedly how exactly this works needs to be made more precise.

To sum up, the distribution of adjectives modified by MPs in the small clause complement of *seem* does not conform to Matushansky's description of the facts and, as such, it does not support the syntactic degree account she proposes. Instead, the facts seem to favour the type of approach she rejects, namely the one based on vagueness, or imprecision.

We will next examine the main prediction of the syntactic degree account and show that it actually runs amiss of the facts.

3.2.4 Non-gradable expressions in the complement of *seem*

The syntactic degree account requires the presence of a DegP in the small clause complement of *seem*. Consequently, this complement will have to contain either an inherently gradable noun or adjective, since these are the types of elements that can project a DegP in the syntax; or it should contain a noun or adjective that have become gradable due to scalarity coercion triggered by the presence of a degree operator. Therefore, the case of basically non-gradable expressions which can appear in the small clause complement of *seem* becomes an essential testing ground for the syntactic degree account and its predictions. In this sub-section, we will examine the case of adjectives, and show that the syntactic degree account makes the wrong prediction with respect to the acceptability of some data and/or to the interpretation assigned to certain examples. We will also briefly consider some cases of DPs that are clearly inherently non-gradable, and which cannot be claimed to have coerced gradable meanings either. We will give a more precise indication of what we think

[85] The examples in (63) are from Matushansky (2002b). However, not all speakers agree with these judgments. On the one hand, (63)b is not completely fine. On the other hand, (63)a may become better if a context can be created where there is doubt as to his height. Such judgments are in accordance with the facts illustrated in (60)-(62) as well as confirming the explanation we propose for (63). Normally, the MP used in (63)a is too precise to be used with *seem*; however, if the context can be manipulated so as to force doubt or uncertainty of evaluation (cf. also the influence of contrast or relativization with respect to time and/or location illustrated in (61)-(62)), this may override the precision of the MP and the example becomes better. If this is easier to do in (63)b, it is presumably due to the use of the comparative which the MP modifies, as we suggest in the main text.

the appropriate interpretation of the cases of non-gradable adjectives is, as well as examining the case of nouns, in §3.3.1.1 and §3.3.1.2, respectively.

Consider the following example containing a basically non-gradable adjective:

(64) Lucy seems Spanish.

Matushansky (2002b) treats such examples as cases of scalarity coercion, whereby the adjective becomes semantically gradable, meaning something like 'having (many) properties (stereo)typically associated with being Adj'. Hence, Lucy seems to have some properties one would stereotypically associate with being Spanish, without that necessarily referring to her actual nationality. (This is similar to the interpretation obtained when such normally non-gradable adjectives are used in the context of overt degree modifiers like *very* or in the comparative etc. – cf. the discussion around example (3) in chapter 1, §1.1) As a result, the adjective is assumed to also project a DegP in the syntax thus qualifying for use in the small clause complement of *seem*.

Therefore, the expectation under the syntactic degree account would be that the basically non-gradable expressions that can occur in the small clause complement of *seem* should have the interpretation normally associated with scalarity coercion. In what follows we will test this prediction by examining more examples of adjectives that are generally taken to be non-gradable. Consider first the following examples containing nationality adjectives, similarly to (64) above.[86]

(65) a. The name seems French.
b. The accent seems French, but there is something strange about it.[87]
c. Her accent seems Spanish.[88]

The adjectives in these examples cannot be said to have become gradable and to have acquired the type of interpretation associated with scalarity coercion. Instead, they retain their basic nationality interpretation, and the examples simply convey uncertainty as to whether the referent belongs to the respective category (i.e. nationality) or not. (65)b, for instance, could be uttered in a context where the speaker is not sure about whether the accent is actually French because s/he cannot hear it properly; it is not about the accent exhibiting properties (stereo)typically associated with being French. The examples could be paraphrased as 'I {think/ am not sure} the {name/ accent} is {French/ Spanish}'; in other words, based on the available evidence the speaker cannot decide with certainty whether it should be assigned the respective nationality.

The next sets of examples contain relational adjectives which normally have classificatory uses (generally assumed to map kinds into sub-kinds – cf. Bosque and Picallo 1996, McNally and Boleda 2004 a.o.) that are taken to be basically non-gradable:

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[86] The same observation can be made in connection with the attributive use of such adjectives, which is normally excluded:
(i) The collocation seems a Spanish borrowing (to me).

[87] Source: http://gaming.thecasavants.com/char.htm

[88] Source: http://garabatoz.deviantart.com/art/Paulina-vs-Trixie

(66) a. The basic problem seems mathematical; their members constitute less than 15 percent of the House of Commons...[89]
b. What to do about setting posting limits? do you see this as an anti-spam method? I really don't know what to do with it. The problem seems mathematical to me.

(67) a. The type of music seems classical, but I like how Lionhead adds sort of a fantasy element to it.[90]
b. At times, her music seems classical in its form and structure, and at others, her soaring, skating vocal dancing seems almost angelic. [91]
c. His music seems classical to me, but I'm not sure.[92]

The examples of unacceptable adjectives in the complement of *seem* given in (49)b from Bolinger (1972) (see also chapter 1), are in fact of this type. As (66) and (67) show, however, we do find grammatical examples containing such adjectives. In fact, Matushansky (2002b) remarks, in a footnote, that the examples indicated as ungrammatical in Bolinger (1972) are odd, rather than completely ungrammatical. Significantly for us here, again, the interpretation of these adjectives does not seem to go along the lines proposed for cases of scalarity coercion by Matushansky. Rather they seem to somehow stretch the concept. For example, as soon as the nature of a problem can be conceived of as being open to evaluation, examples like (66) are possible, and the interpretation they get is something like 'this problem belongs to the general realm of mathematics' but based on the available evidence or knowledge, the speaker cannot make an unequivocal decision; and likewise for (67). The uncertainty of assessment which is at stake is quite straightforwardly indicated by the second part of the sentence in (67)c: *I'm not sure*.

Finally, here are more examples containing other adjectives which are generally considered to be non-gradable, such as *pregnant*, or absolute, such as *dead*, and whose use in the complement of *seem* cannot be regarded as the result of scalarity coercion:

(68) a. The man seems dead.[93]
b. The woman seems pregnant.
c. The bar seems closed to me... big padlocks on door during supposed opening hours…
d. The case seems closed.[94]
e. The store seems open only 2-3 days per week.[95]

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89 Source: http://www.nytimes.com/1987/05/15/world/tories-experiment-in-ailing-scotland.html
90 Source: http://lionhead.com/forums/p/240229/3042281.aspx
91 Source: http://www.johneverson.com/bug6.htm and http://www.popstops.net/dcdbox.htm.
92 Source: http://answers.yahoo.com/question/index?qid=20080921162723AAHB6q3
93 Here are some complete examples found on the internet:
(i) a. A body has been found in the left corner of the bar. The man seems dead but we don't have a cause of death. (http://www.roleplaygateway.com/roleplay/the-multiverse/characters)
b. In the end Peaches the man seems dead or passed out while androgynous Peaches cleans her face in front of a mirror. (http://en.wikipedia.org/wiki/Downtown_%28Peaches_song%29)
94 Source: http://www.thefreelibrary.com/cafe+serves+up+vivid+characters+surroundings
95 Source: http://www.yelp.com/user_details?userid=jZjVBILxo-KVSbMQPFKuMg

Dead, for example, in (68)a does not receive the type of gradable interpretation it does in cases of overt degree modification like *more dead than alive*, where its meaning is coerced; it is not the case here that the man could be more or less dead in (68)a. All the adjectives in (68) retain their basic, literal meaning. What is involved is uncertainty in ascertaining whether the property holds.

Finally, we would like to bring in some nominal cases which present a serious problem to the syntactic degree account proposed by Matushansky (2002b), as well as a simple gradability approach in fact (cf. Bolinger 1972, Maling 1983). These are cases such as those illustrated in (69), which do not seem to contain an expression that could be argued to project a DegP in the syntax, or that could be considered to be gradable in the first place.

(69) a. This seems the end for us.
b. Wind seems a species of light.[96]
c. And this seems the explanation of the fact that the marine shells […] are much larger than the shells of the same species now inhabiting the weakly-saline Caspian.[97]
d. This seems the sense of "God is love" Wallace is considering.[98]
e. There is plenty of that brand of homespun common sense that seems a trait of chemical engineers of that generation (regular readers of ChemTech will feel at home with this book).[99]
f. This seems {the way to do it/ the only way out/ the only option}.
g. This proposal seems the opening shot in an upcoming campaign against any measure that doesn't offer Omaha's black community autonomy over their home district.[100]

In all these cases it could hardly be claimed that gradable meanings are involved. What is at stake is, just like in the examples containing basically non-gradable adjectives considered above, uncertainty as to whether the (abstract) entity under discussion has been correctly identified as being what the definite DPs express.

In sum, closer examination of the interpretation of basically non-gradable adjectives that may occur in the complement of *seem* shows that the main prediction of the syntactic degree account is not borne out. Grammatical examples of basically non-gradable adjectives are not necessarily interpreted in a sense that would correspond to the meaning predicted by Matushansky if they were subject to scalarity coercion triggered by the presence of a degree operator. The same holds for the examples of non-gradable DPs. Therefore, what is at stake is not having a higher or lower degree of a property, or a bigger or smaller amount of properties (stereo)typically associated with A or N, but rather uncertainty as to whether A or N applies or not (given the available evidence).

In view of the problems facing the syntactic degree account, and of the additional facts that have been presented so far, it becomes desirable to find an alternative

[96] Source: British National Corpus
[97] Source: *The Encyclopaedia Britannica* on http://books.google.com/
[98] Source: http://secularoutpost.infidels.org/2011/01/say-what.html
[99] Source: British National Corpus
[100] Source: http://newnebraska.blogspot.com/2007/01/sifting-through-ops-mess.html

account. In the remainder of this section, we will suggest a possible direction, which takes *seem* to always be epistemic.

3.3 Towards an alternative account

In this section we would like to show that an epistemic analysis of *seem* can be maintained, and that the restrictions on its small clause complement stem from how properties (as expressed by AP or DP), differently from propositions (IPs), are evaluated. We suggest that the evaluation of properties requires encyclopedic knowledge that can be expressed either in terms of "objective", definitive criteria, or in terms of "subjective" criteria. Expressions denoting properties defined by means of the second strategy are compatible with the epistemic uncertainty encoded by *seem* and can, therefore, appear in its small clause complement.

3.3.1 Two types of predicates

It was shown in the previous section that the small clause complement of *seem* is not restricted to lexically gradable expressions or expressions that may be argued to project a DegP in the syntax. It was also shown that the grammatical examples of basically non-gradable expressions (mainly adjectives) in the small clause complement of *seem* (e.g. (65)-(67)) do not involve a shift in the meaning of the adjective in the sense of a gradable interpretation. They suggest instead that the meaning of *seem* involves uncertainty in assessing whether the property expressed applies to a given individual, or, in other words, uncertainty as to whether the instance referred to is of the type denoted by the AP or DP. What seems to matter, therefore, for the acceptability of these expressions in the small clause complement of *seem* is that they (come to) express properties whose application in particular circumstances may be subject to uncertainty. We would like to propose that what underlies this is whether the property expressed by the adjective can be verified by "objective" or by "subjective" criteria. In what follows we will illustrate the distinction between the two types of predicates in the adjectival and nominal domain and show that it indeed correlates with the possible occurrence of adjectives and nouns in the small clause complement of *seem*. We will also show how a "subjective" interpretation may be introduced and license the use of "objective" predicates, which would otherwise not be able to occur in this environment.

3.3.1.1 The interpretation of non-gradable adjectives

The difference between the two types of expressions can be most easily illustrated by comparing the adjective dead, whose possible occurrence in the small clause complement of seem was shown in (68)a, and its antonym, alive, which is ungrammatical in the small clause complement of *seem* when it is used in its basic, literal sense:

(70) He seems alive *(and well).

We propose that what underlies this contrast is a difference in the types of criteria that may verify the two properties. There are various "subjective" criteria which are normally associated with death and may be used towards establishing death. These possible "signs" of death include e.g. that the person is not breathing, that s/he is lying motionless on the floor, or that blood is pooling under him/her, etc. These may vary over different contexts/ possible worlds; it is not the case that in all possible worlds these properties (criteria) are exclusively associated with death. On the one hand, therefore, such a "subjective", vague condition is normally sufficient for the property *dead* to be predicated with reasonable certainty. On the other hand, such conditions also allow room for uncertainty in establishing death in certain situations.[101] This makes the adjective compatible with the uncertainty expressed by *seem*. By contrast, to establish that someone is alive, there is one definitive criterion that must be satisfied: if the person is still breathing, s/he is *ipso facto* alive. In other words, a definitive condition, one that is both necessary and sufficient, is required to conclude that someone is alive, but a vague condition may be enough to conclude that someone is dead. Expressions denoting properties defined in the latter, but not in the former, way are compatible with *seem*.

What underlies the acceptability of the examples in (66)-(67) are similar. Although these cases involve concepts that are generally considered to be sharp (e.g. *mathematics/ mathematical*, *classical music*), if the nature of certain objects can be stretched or somehow made fuzzy, by the introduction of "subjective" criteria, such expressions become acceptable in the small clause complement of *seem*. Take (66)a, for instance. What it says is that the problem exhibits some properties that are normally, superficially associated with mathematics, such as involving numbers or calculations, and that are normally sufficient for predicating the respective property of an object.

Sets of vague, "subjective" conditions are typical of predicates whose boundaries are fuzzy and difficult to establish with certainty, while definitive conditions apply to predicates that have clear-cut defining characteristics.[102] The former, but not the latter, are compatible with *seem*. What is at stake in such examples is uncertainty as to whether the respective property applies, i.e. whether the conditions for predicating it are satisfied – e.g. due to insufficient access to evidence. As already shown, the distinction between these two types of predicates cross-cuts the distinction between gradable and non-gradable expressions. In §3.3.2.2 we will discuss in more detail the relation between such criteria and the properties they verify as well as the role they play in the evaluation of the predication.

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[101] Of course there are also "objective", definitive conditions that allow to establish death (medically/ scientifically) with certainty, such as the absence of any neural activity, but the point is that for the layperson, a vague condition allows for the property 'dead' to be predicated with reasonable certainty.

[102] Johan Rooryck (p.c.) suggests that the distinction between the two types of predicates may be illustrated by using the test of contradiction. In (ia), the evaluation that Sue was dead can be contradicted quite easily. That is not the case for the sentence in (ib), where adding the second sentence leads to infelicity.

(i) a. We saw that Sue was dead, (but it later turned out that she wasn't).
b. We saw that Sue was alive, (#but it later turned out that she wasn't).

3.3.1.2 The case of nouns in the small clause complement of *seem*

Similar observations can be made about the distribution and interpretation of nouns in the small clause complement of *seem*.

Recall first the contrast usually pointed out in the literature:

(71) a. Eric seems a fool.
b. *Eric seems {a man/ a doctor}.

The nouns used in these examples may indeed contrast in terms of gradability; for instance, a noun like *fool* consistently passes, while nouns like *doctor* fail various gradability tests, such as e.g. modification by degree adjectives.

Consider now, however, the contrast between the following sets of examples:

(72) a. He seems a Christian.
b. He seems an artist.
c. He seems a gambler.
d. He seems {a Casanova/ a ladies' man}.
e. He seems {a friend/ an ally}.

(73) a. *He seems an Anglican.
b. *He seems {a painter/ a doctor}.
c. *He seems a blackjack player.
d. *He seems a polygamist.
e. *He seems an enemy.

It is highly questionable that the difference in acceptability between these two sets of examples is due to (non)gradability. Applying other gradability tests to these nouns, such as modification by degree adjectives, gives diverging results. In each set there are nouns that seem to admit such modification (e.g. *a big gambler*, *a big/ huge enemy*), and others that do not (e.g. **a big Christian/ ally/ polygamist* etc.). If both occurrence in the small clause complement of *seem* and modification by degree adjectives are taken to be due to gradability, then their differing results require an explanation.

We propose that, just as in the case of adjectives examined previously, it is not gradability that plays a role in the acceptability of nouns in the small clause complement of *seem*. Instead, the explanation of the contrast lies in the same type of difference as noted above. Namely, the nouns in the first series involve more complex, and vague, sets of "subjective" criteria based on which one can decide whether an individual belongs to the respective category. As such, there is more room for uncertainty of assessment, which makes them compatible with the meaning of *seem*. The nouns in (73), on the other hand involve definitive, clear-cut criteria that verify whether the properties apply or not (e.g. relevant diploma in the case of *doctor*).The contrast between (72)a and (73)a also suggests that hyperonyms are more likely to be verified by vague criteria than hyponyms, which are more specific.

3.3.1.3 Modification

Interestingly, under particular conditions, expressions that are normally barred from the small clause complement of *seem* may be licensed in this environment.

One type of factor which influences the acceptability of examples containing measure phrases, dimensional adjectives, or nouns that are normally not very good with *seem* is the use of negation and focus (e.g. using the particle *only* or contrastive stress on *seem*).[103] Compared with the unacceptable examples in (74), the examples in (75) and (76) show the effect of negation (either used on its own, or in combination with contrast/focus or with temporal modification), and of focus, respectively.[104]

(74) a. *He seems a tall man.
b. *He seems a {radical/ doctor}.
c. *Obama seems a Bill Clinton.

(75) a. He doesn't seem a tall man (but his legs seem long).
b. He doesn't seem a radical.
c. Obama doesn't seem a Bill Clinton quite yet.

(76) a. He SEEMS a tall man, but in fact he is wearing platform shoes.
b. He only SEEMS a tall man.
c. He only SEEMS a doctor.

It is not clear how these facts could be accounted for either in a simple gradability approach to *seem* (e.g. Bolinger 1972) or in a syntactic degree analysis like Matushansky's, which requires the presence of a DegP to check an uninterpretable degree feature. It is not likely that negation or focus could be influencing the gradability of the complement of *seem*, or that such elements could (syntactically) check a degree feature. The view we have suggested above can offer a way to understand them. As usual, focus determines the introduction of a set of alternatives. We suggest that in the cases under investigation here the alternatives that are introduce bear on the conditions for verifying the properties that are being evaluated. In case this is a property defined by "objective", definitive criteria (e.g. *doctor*), this will result in forcing the addition of alternative, "subjective" criteria consisting of properties superficially associated with the respective property (which would normally not count towards concluding that the property holds of an individual). This is what creates room for uncertainty about their applicability and makes them compatible with *seem*. Thus, an example like (76)c will say that the individual in

[103] Modifiers like *sure*, which have an epistemic interpretation, also have a similar effect.

[104] Here are some additional examples. (i) contains the focus particle *only* and MPs in the small clause complement, and (ii) shows that contrast enables a DP containing a non-gradable and non-vague noun modified by a nationality adjective to appear in this environment:

(i) a. But if someone with longer arms uses the same string at arms' length, suddenly it only seems 8 inches long! (http://www.meteorobs.org/maillist/msg09977.html)
b. Sometimes, he has to remind himself that she only seems ten feet tall because she carries her head that high. (http://fanfictioncdn.fictionpressllc.netdna-cdn.com/community...)

(ii) To an outsider their province seems a French dependency, a French colony, rather than part of France. (http://www.gourmet.com/magazine/1940s/1947/08/alsace)

question may exhibit such superficial properties, but not satisfy the actual definitive criterion for qualifying as an N. As a result, such examples will imply that the individuals are in fact not A or Ns. As already pointed out (cf. §3.2.3), an explicit or implied contrast (between apparent, superficial and actual properties) often facilitates the use of expressions in the small clause complement of *seem*. *Seem*, therefore, ends up being used when one lacks the grounds for using *be*.[105]

Consider now the following contrast:

(77) a. *She seems a Catholic.
b. "And though she seems a Catholic in public, I have a strong suspicion that in private she is a Lutheran"[106]

The contrast introduced by the two PPs *in public* vs. *in private* restricts the application of the predicate: it applies under this restriction, but not in other cases. This has the effect of introducing uncertainty about the subject's Catholicism, thus turning a predicate that is evaluated in terms of definitive criteria out of context into a predicate that responds to vague, "subjective" criteria, i.e. Catholic in public, not Catholic in private.

The same sort of effects (i.e. of contrast and "relativization" obtained by means of temporal or locative modification) were already noted in examples of measure phrases and non-gradable adjectives used in the small clause complement of *seem* in §3.2.3 and §3.2.4 – cf. examples (61), (62), (67)b etc.

3.3.2 The alternative view

The proposal we would like to suggest in view of the facts observed so far consists of two parts, both of which go against the claims made by Matushansky (2002b). First, gradability, either lexical or syntactic, has been shown not to be a prerequisite for expressions occurring in the small clause complement of *seem*. Instead, what underlies the distribution of expressions in this environment whether the criteria verifying the applicability of the predicate are "subjective", vague criteria (consisting of properties normally/ superficially associated with the property expressed by the predicate in question) or "objective", definitive criteria. If an AP, NP or PP predicate is verified by the first type of criteria, it is compatible with *seem*. We argue that this is because *seem* is always epistemic and includes an evidential meaning component, namely it involves the expression of uncertainty and inference, and the expressions in its small clause complement need to be compatible with the uncertainty of assessment inherent in the meaning of *seem*. The vagueness inherent in gradable expressions will make them good candidates; however, it is not the case

[105] This suggests that the verbs *seem* and *be* may be regarded as forming a scale, similarly to how quantifiers like *all* and *some* are assumed to be related to a scale. As such, there may be scalar implicatures holding between them. Thus, we have (i)a in a parallel way to (i)b:
(i) a. He SEEMS but is not {a doctor/ a tall man}.
b. Some, but not all, answered my question.

[106] Source: Alison Shell, Catholicism, Controversy and the English Literary Imagination, 1558-1660 Cambridge University Press, 1999.

that only gradable predicates are, nor that all gradable predicates are vague in a way that makes them compatible with *seem*. In what follows, we will first examine the epistemic nature of *seem* and subsequently show what accounts for the particular restrictions on its small clause complement.

3.3.2.1 *Seem* is always epistemic/ evidential

Recall that Matushansky (2002b) claims that *seem* is a case of lexical ambiguity: there is an epistemic verb *seem*, which takes IP or CP complements, and a perception verb *seem*, which takes small clause complements. She discusses the difference in interpretation between the two on the basis of the following examples:

(78) a. The squire seems sick.
b. The squire seems to be sick.
c. It seems that the squire is sick.

She claims that (78)a cannot be felicitously used if there is no perceptual evidence available. For example, one cannot enter a room, look at Kleenexes and medicine bottles strewn all over the floor and utter this sentence. One can, however, utter (78)b or (78)c under such circumstances. She concludes that (78)a implies perception of the subject's condition by the experiencer (*I perceive that P holds*), while (78)b and (78)c, which are truth-conditionally and pragmatically identical, are epistemic deductions (*from what I see I conclude that P holds*).

However, this is not a completely accurate rendition of the interpretation of (78)a. Such examples are not simply factual statements of perception (of P holding), unlike similar examples with verbs of perception such as *look*, *sound* etc. which simply involve the attribution of a property based on visual or oral perception. *Seem*, even when it takes a small clause complement, as in (78)a, also implies some epistemic evaluation of the evidence available, i.e. based on the available evidence it is inferred that P may hold. So the paraphrase Matushansky proposes for (78)b-c in fact extends to (78)a too. If there is a difference between the two, it does not consist of the absence vs. presence of an epistemic meaning component.

In addition, her definition of *seem* as a verb of perception needs to be wide enough to include what she calls "metaphorical" uses, such as (79), where it is quite unclear that it is actually perception that is involved.

(79) The law seems unfair.

Thus, the line between an epistemically derived conclusion and a perceptually derived one becomes almost impossible to perceive. In fact, Matushansky acknowledges that she finds it "next to impossible to formulate the difference between [the two]" (p. 225). She also notes that the distribution of epistemic *seem* encompasses that of perceptual *seem*. This significantly weakens her argument, and casts doubt on the proposed distinction between two verbs.

We would like to suggest instead that all instances of *seem* share a basic semantic core which consists of an epistemic/ evidential meaning component:[107] *seem* expresses the modal value of uncertainty, correlated with the evidential notion of inference.[108] What differs is the level on which this meaning component operates. In case *seem* takes a sentential, IP or CP, complement, this meaning component will operate on full propositions, or complex situations. When *seems* takes a small clause complement, it will apply to the predication expressed by the small clause. We assume that *seem* is a raising verb in all cases, which may select for a sentential complement (infinitival or finite clause) or for a bare small clausal complement. For the small clause complements, which we are interested in here, we adopt Den Dikken's (2006, 2008) analysis of bare small clauses as phrases headed by a functional head RELATOR. The small clause predicate is the complement of this functional head, while the subject is base-generated in its specifier, but subsequently raises to the subject position of the main clause predicate.[109] The structure of (78)a would therefore be as schematically represented below:

(80) … [$_{VP}$ seems [$_{RP}$ t$_{\textit{the squire}}$ [RELATOR [sick]]]]

Small clauses are, therefore, quintessential predications, and the epistemic evaluation contributed by the selecting verb *seem* will bear on the predication relation they contribute. This boils down to evaluating whether the property expressed by the small clause predicate holds of the subject.
In the next sub-section, we will show how the noted restrictions can be derived from the interaction of the epistemic meaning component with the different types of complements; now we will focus on the epistemic content of *seem*.

The felicitous use of *seem* requires uncertainty with respect to the evaluation of the proposition or property in its complement. Take the following example:

(81) The squire seems (to be) sick.

In either of its two versions, this sentence can only be uttered felicitously in a context where the speaker has indirect evidence: upon noticing that the squire suddenly looks very pale (after eating), or hearing certain noises from the next room etc. But it cannot be uttered if one directly witnesses the squire throwing up, or the doctor giving a diagnostic. Therefore, *seem* exhibits a dependency on the information that is available in the context and which can be used as a basis (i.e. as

[107] Interestingly, some English grammars note that *to be* deletion in the complements of verbs such as *seem, consider, think, imagine* etc. is only possible with adjectives and nouns that make a judgment. *Seem* is used "when the Arbiter is not fully certain whether the adjectival description is appropriate, or whether the statement of the complement clause [e.g. *like/ as if* clauses] is correct – perhaps when there is not enough evidence. *Appear* has the same syntactic possibilities and a very similar meaning, but may imply 'can be observed by me' in contrast to *seem* 'can be inferred by me'." (Dixon 1991/2002:202) The intuition expressed here is similar to the one underlying our attempt to find an alternative account.

[108] Hence, the experiencer of *seem* is not just an experiencer, but also the epistemic agent: the one who observes / perceives the evidence, and also evaluates it and makes an epistemic judgment based on it.

[109] Heycock (1994) proposes that the small clauses selected by *seem* (also by *consider*) involve even more minimal structures, namely that they are simply the projection of a lexical predicate (an adjective or a noun) (see also Stowell 1991, Guéron and Hoekstra 1995).

evidence) for making an inference that a property or a situation holds. This is parallel to the behaviour of epistemic modals. Von Fintel and Gillies (2007) a.o. observe that in a context in which we see people coming into the building carrying umbrellas, it would be perfectly acceptable to say *It must be raining.* But if we look out of the window and see the pouring rain, it would be very strange to utter such a sentence. What one should say in the latter scenario is the non-modalized sentence *It is raining*. They suggest that the dependency of epistemically modalized sentences on the information available in the contexts in which they occur can be understood if epistemic modals are taken to include an evidential component in their meaning, in the sense that they signal the presence of an indirect inference or deduction rather than of a direct observation. In more recent work (von Fintel and Gillies 2010), they reformulate this by saying that the kernel (or privileged information – which corresponds, more or less, to the modal base in Kratzer 1977, 1981) "does not directly settle whether *p*". They treat this evidential signal that epistemic modals contain as a presupposition, and impose its satisfaction as a definedness constraint on the assignment of truth values in a context at a world. We propose that von Fintel and Gillies' account of epistemic modals as containing an evidential signal also applies to *seem*. With sentential *seem*, the evidential meaning component is related to general indirect inference or hearsay. The small clause *seem* is also evidential/ epistemic in this sense; it appears to involve inference based mainly on evidence that is available through perception, but not exclusively so: there are also cases like (79) above, which do not involve perception in the literal sense. More about what can count as evidence (and why) will be said in the next sub-section.

The relation between *seem* and its complement may be understood as in Rooryck's (2000) 'comparative' account of sentential *seem*. In the case of small clause complements, what is involved is uncertainty in assessing (in view of some evidence) the resemblance of a particular instance (i.e. the state holding of the subject) to the type of property expressed by the predicate in the complement of *seem*, i.e. whether the instance referred to is of the type denoted by the AP or NP. When *seem* takes an IP/ CP complement, the relation is established at the propositional level – comparing (complex) situations. What is involved in these cases, is uncertainty in evaluating the resemblance of a given situation (the one referred to via the "demonstrative components" of the sentence – e.g. the tense on *seem*, the raised subject DP) to a typical situation of the type described by the complement CP (cf. Rooryck 2000).

3.3.2.2 Evaluation of properties vs. (complex) situations

In the preceding paragraphs, we have discussed the common core of all uses of *seem*, i.e. both with sentential and with small clause complements. But there is also a fundamental difference between the two, which is reflected in the noted difference with respect to selectional restrictions imposed on what can appear in its complement: when it applies to propositions (situations) there are no restrictions, but when it applies to properties there are.

Note, in this context, that such behaviour is in fact not unique to *seem*. On the one hand, the same modal or evidential expression may differ in the selectional restrictions it imposes on different types of complements. On the other hand, a

modal expression or an evidential marker may occupy different positions in the syntactic structure, and, depending on the level at which they occur, the resulting interpretation may differ. For example, in Dutch modals which can take not only infinitival, but also AP or PP complements. In the latter case, however, they can only get a deontic interpretation. In the evidential domain, Blain and Déchaine (2006) propose that evidential markers can be introduced in a number of different positions in the clause, namely in the CP, IP, AspP, and vP domains; and they analyse the nonvolitional force of nonvisual evidentials in the first person as an instance of vP-external evidentials.

We would like to suggest that the difference found between the cases where *seem* takes a sentential complement and those where it takes a small clause complement is due to a difference with respect to how complex situations/ propositions (sentential complements) vs. predications (small clause complements) are evaluated, and what counts as evidence in doing so. There is a difference in the range as well as in the nature of the knowledge based on which the felicitous epistemic use depends (i.e. on which uncertainty can be assessed).

With propositional complements, one is quite free to use any type of circumstantial indications, hearsay etc. as evidence in a context based on which to make an inference 'that *p*', expressible by *seem*. The fundamental uncertainty that is required for a felicitous epistemic interpretation depends on what the speaker broadly knows contextually; a context is needed that spells out the knowledge of the speaker with respect to the prejacent, e.g. *[the squire to be sick]*.

When *seem* takes a small clause complement whereby the predication is being evaluated, i.e. whether the property expressed by the small clause predicate holds of the subject, one is restricted to properties which are observed to be manifested in the subject itself and which are somehow associated with *P* and may be used as indications that *P* holds of that subject. Other, subject-external, circumstances cannot be used as evidence that *P* holds of the subject. This is why, for example, (78)a can be uttered upon perception of the subject's condition by the experiencer, but not upon entering a room and seeing Kleenexes and medicine bottles covering the floor. In a sense, then, evidence for properties is less flexible than evidence for (complex) situations. What counts as *P*, or what is a "sign" of *P*, is largely part of speakers' encyclopedic knowledge (rather than being strictly linguistic). Therefore, unlike with sentential complements, here the uncertainty that is required for a felicitous use depends much more strictly on what the speaker knows encyclopedically. This requirement of uncertainty accounts for the impossibility of certain AP and DP predicates in the small clause complement of *seem*: if it is a predicate that must be interpreted out of context in terms of definitive, purely objective criteria (as discussed in §3.3.1), the sentence will be semantically infelicitous. Unless, as the discussion in §3.3.1 has shown, the right context is obtained where even "strict" concepts may be "relativized" (recall the influence of focus, temporal modification etc.) which would create room for uncertainty as to whether the *P* applies in a particular case, as required by *seem*.

In other words, what seems to be needed is an expression which comes with associated manifestations or properties, which form vague sets of vague, "subjective" criteria for application of *P*. On the one hand, these should be

observable properties.[110] On the other hand, they may apply only part(ial)ly and they are not exclusive "symptoms" of just one particular P.[111] Thus, they allow for uncertainty in evaluating whether the predicate holds or not. This is quite easy to see with adjectives like *sick* and *dead* vs. *alive* (as discussed in previous sub-sections). Or take the nouns discussed in §3.3.1.2. The fact that some involve vague criteria (e.g. *Christian*, *artist*, *friend* etc.) may have to do with the fact that, in addition to the definitional core, e.g. the actual occupation or religion, they involve a whole series of associated attitudes, manifestations, properties based on which it can be ascertained whether X is N. In other words these may count as evidence compatible with the property holding of the subject, and still allow for uncertainty. Others (e.g. *doctor*) only have definitive criteria, that are at once necessary and sufficient conditions (e.g. the relevant diploma), based on which it can be decided whether an individual belongs to the class of Ns or not. One cannot conceive of any associated, "signalling" properties which may be manifested by an individual and which may be used as evidence indicating that this P holds of an individual. Hence, such nouns are not compatible with *seem* in a small clause structure. Recall, however, that a contrast was noticed between the unmodified and the modified use of such nouns in the small clause complement of *seem*, as illustrated below:

(82) a. *Eric seems a doctor.
b. Eric seems a good doctor.

Modification by an adjective (especially an adjective like *good*) ensures an interpretation in terms of less objective, more vague or subjective criteria. This allows for a lot of space for uncertainty of assessment, and the DP can occur in the complement of *seem*. However, as one may recall from §3.2.1-3.2.2, and as illustrated again below, simply adding a gradable adjective does not automatically license the use of a noun like *doctor* in the small clause complement of *seem*.

(83) *He seems a {tall/ handsome} doctor.

The adjective introduces some fuzziness, in virtue of it being gradable, hence vague, but this is not relative to and does not carry over to the concept of 'doctor', which heads the phrase located in the small clause complement of *seem.* So the NP as a whole still does not make a good complement for *seem*. Note also that the

[110] It should be noted that *seem* is not confined to strictly perceptual, concrete evidence, but accepts more general(ly observable) sorts of evidence. In this it differs from the verb *look*, for example, which is strictly specified for direct visual perception. In evaluating *He looks tired* only information based on direct visual perception of the subject's state will count, while in evaluating *He seems tired* the inference that he may be tired can be based on information derived not only from physically visually perceptible features, but also from more general behaviour that may be related to tiredness (e.g. he cannot find the right words etc.). If the evidential component is made part of the lexical meaning of the verb (as suggested above), and if this type of approach is also extended to verbs like *appear*, *look*, *sound* etc., this would allow us to capture the differences among these verbs (i.e. with respect to the specification of evidence).

[111] Take, for instance, the relation between *being pale* and *being sick*, where the former may serve as evidence based on which it may be inferred that the latter may hold (and which would make a sentence with *seem* felicitous). The idea would be that one does not necessarily and exclusively imply the other; in other words this is a relation that holds in some possible worlds, not in all possible worlds.

corresponding sentence with the copula *to be* (*He {seems to be/ is} a tall doctor.*) is also very odd, especially when uttered out of the blue. *Tall doctor* becomes better when more context is provided: this can be seen in (84)a, where what is being evaluated is whether the subject belongs to a rather vague category that is being proposed ("those tall country doctors that all the village women fall in love with"). The difference in the possibility of establishing a category, that may have vague criteria of application, is probably also what makes (84)b better than (83): *handsome men* vs. *handsome doctors*. Note, incidentally, that, again, the more general term is better suited for such uses than the more specific one.[112]

(84) a. He {is/ seems} one of those {tall/ handsome} country doctors that all the village women fall in love with.
b. ?He seems a handsome man.

This also shows, once again, that gradability tends to make an expression well suited for use in the small clause complement of *seem*, in virtue of the vagueness associated with gradable expressions, but that gradability as such (and the type of vagueness it introduces) is not sufficient, in addition to not being necessary, as shown throughout this section. To illustrate again the latter point, take the adjective *pregnant* (cf. (68)b). Adjectives like *pregnant* or *dead* have very precise (scientific, medical) definitions and are typical examples of non-vague, or "all-or-nothing" adjectives: they are not contextually variable; someone is definitely either pregnant/ dead or not pregnant/ dead, there is normally no in-between, grey area; and it does not give rise to the Sorites paradox.[113] The vagueness which is relevant for *seem* is related to the (un)certainty of assessing whether the property holds, and arises from the point of view of an epistemic agent trying to gather evidence and evaluate a state of affairs based on it. The states denoted by adjectives like *pregnant* or *dead* involve a series of accompanying manifestations, symptoms etc. that may be observed, and these may be used as evidence for assessing whether the respective state holds of someone, and this assessment may open to uncertainty. This is what makes such expressions compatible with *seem*.

In fact, this set of manifestations of properties somehow associated with *P* may be all that is needed, and may even be completely stripped from the basic, definitional core of the N. This is what happens in the case of nouns used under a

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[112] Note also:

(i) He seems like a doctor.

Like relativizes, by introducing a class based on resemblance to doctors and it can be under debate whether or how much of it applies.

[113] Sentences involving gradable predicates, in particular those associated with relative standards (cf. Kennedy and McNally 2005, Kennedy 2007a), are characterized by three main features that point to their vague nature. First, they display contextual variability in truth conditions. Second, they are characterized by the existence of borderline cases: for any context, in addition to the sets of objects that the predicate is clearly true of and clearly false of, there is typically a third set of objects for which it is difficult or impossible to make these judgments. And finally, sentences containing vague predicates give rise to the Sorites paradox. This due to the uncertainty about the boundaries of a vague predicate's extension, about the cut-off point between P and non-P. (cf. Klein 1980, Kennedy 2007a, van Rooij to appear a.o.)

Note that, in fact, a noun like *heap* which is typically used to illustrate the Sorites paradox does not make a good small clause complement to *seem*: *??That seems a heap.*

figurative interpretation, where *x* is actually not an N, but (only) has properties stereotypically associated with Ns:

(85) a. This house seems a palace after the shelters where we have passed our nights for the last couple of weeks.
b. The boy seems a scholar.
c. This child seems a clown (at times).

The interpretation of these examples involves the observation of some sort of behaviour or some properties that are in some way associated with being N; based on this, it may be said that X resembles N.[114]

These semantico-pragmatic differences between "complex situations", as expressed by IP or CP complements, and predications, as expressed by small clauses, are correlated with a difference in syntactic complexity. For example, sentential complements (even infinitivals) contain a series of clausal and verbal functional projections, which small clause complements lack. This follows from the analysis of small clauses as bare predications which we have adopted following Den Dikken (2006, 2008) and it is a hallmark of small clauses (especially small clause complements of verbs like *seem* and *consider*) and a fact widely accepted in the literature: small clauses lack clausal and typically verbal functional projections. In particular they lack aspect and tense, which has been invoked in the literature to explain their dependence on a higher verbal projection. Guéron and Hoekstra (1995), for example, argue that small clauses are clauses that, due to their smallness, cannot survive by themselves and must be licensed by a temporal or aspectual head in the structure that dominates them. A small clause can be licensed only by having its functional head incorporated into the T-chain of the verb. In Den Dikken's theory this amounts to incorporation of the RELATOR into the verb (this is in fact a reformulation of "small clause restructuring" initially proposed by Stowell (1991) in order to explain facts such as the scope of small clause subjects, something which, however, goes beyond the scope of our investigation here).[115] What is relevant for us here is that that small clauses do not contain projections hosting independent temporal or aspectual information, let alone modal or evidential. Therefore, while the content of the sentential complement can constitute a full, independent situation, the small clause complement is dependent on (the parameters set in) the main clause. Thus, if situations are conceived of as world-time pairs, then the small clause predicate is interpreted with respect to the same world and time as the main-clause predicate.[116] If this is on the right track and the small clause predicate and main-

[114] Again, world knowledge influences the availability of the relevant sort of interpretation. For more discussion of stereotypical interpretations, see chapter 3.

[115] See also Sportische (2005), who, in a discussion of reconstruction facts, argues that small clauses are functionally too small and simply lack the functional structure that introduces quantification. He suggests that this assumption is supported by the fact that, under normal intonation, high adverbs in the sense of Cinque's adverbial hierarchy (e.g. *probably*, *perhaps*) are disallowed in such clauses.

[116] This may be another instance of the Intersective Predicate Generalization proposed by Keshet (2010), which states that two predicates interpreted intersectively (i.e. via Predicate Modification) may not be evaluated at different times or worlds from one another. (Keshet's 2010 generalization, which covers noun-intersective modifier combinations, existential *there*-constructions and depictives, is based on and extends Musan's 1997 work.)

clause predicate (i.e. *seem*, which is an epistemic verb, with an evidential meaning component) make up one situation, then this may be what underlies the restrictions on the possible evidence that can be used to evaluate the predication. Predications can only be evaluated encyclopedically, that is, on the basis of what is known about the property expressed in their predicate. This can consists of either subjective criteria (i.e. necessary but not sufficient conditions for application of P) or objective criteria (i.e. both necessary and sufficient). Only the former type are compatible with the epistemic verb *seem*. In addition, the discussion above concerning the syntactic properties of small clauses can now help to further understand the restrictions on the type of evidence that can be used: it is evidence that can be gathered from the same situation of which the evaluated property is a part (namely to observed properties or behaviour manifested by the subject).

We think this is a promising direction, but have to leave a more detailed investigation of and account for the correlations between the semantic and syntactic properties of these constructions to future research.

3.4 Concluding remarks

This section has shown that the requirement placed on the small clause complement of *seem* is not that it be gradable or that it project a DegP in the syntax. Hence, occurrence in this environment cannot be used as a test for gradability.

Instead, *seem* always contains an epistemic/ evidential meaning component. As such, it involves uncertainty in assessing whether the property expressed by the small clause complement, or the complex situation denoted by the sentential complement, holds.

The noted restrictions on the small clause complement of *seem* can then be viewed as reflecting a need for compatibility of this complement with the basic meaning of *seem*, namely the requirement of uncertainty it places on the evaluation of the property. This will rule out AP and DP predicates that are interpreted in terms of or verified by definitive, purely objective, unequivocal criteria, which allow no room for uncertainty of assessment. Gradable predicates are particularly suitable as small clause complements to *seem* due to their inherent vagueness; however, they are not the only ones and they are not all so either.

A difference has also been revealed concerning the evaluation of complex situations (sentential complements) vs. predications (small clause complements), in the sort and range of evidence that can be used as a basis. The former allow a broader knowledge base to assess uncertainty contextually, while the latter are more restricted, and depend on encyclopedic information.

Although more work is needed in order to provide a more precise account of the intuitions expressed here rather informally, we think that the direction suggested in this section is promising as it seems to capture the facts more accurately than a simple gradability approach or the syntactic degree account.

4 Conclusions

In this chapter we have studied two environments that had been claimed to involve gradability – and where gradability would be relevant for the well-formedness of more complex structures containing the nouns, namely *N of an N* constructions and the small-complement of *seem*. It has been argued here, however, that the distribution of nouns in these contexts is not determined by gradability – whether at the lexical or syntactic level – but by other factors.

In the case of *N of an N* constructions, it was shown that the necessary and sufficient condition for a noun to be able to occur in the first slot is that it can express a value judgment. It was shown that the two categories, i.e. gradability and value judgment, though they may overlap to some extent, can and must be distinguished. Once this is done, the confusion that was seen to exist in some of the literature can be removed and the underlying factor can be clearly identified, and that is the expression of a value judgment.

In the case of *seem*, it was argued that what underlies the restrictions on the distribution of expressions in its small clause complement is of an epistemic and evidential nature. *Seem* is an epistemic verb that contains an evidential meaning component, and the expressions in its small clause complement must be compatible with the uncertainty of assessment involved. Gradable expressions are particularly suitable, as they introduce vagueness, but they are not the only ones, and it is also not the case that all gradable expressions make good complements to *seem*. Here again, therefore, the category of expressions that may occur in the small clause complement of *seem* overlaps, partially but, crucially, not entirely, with the class of gradable expressions. It was also shown that that there is a difference in the way one evaluates whether a predication vs. a complex situation holds, which determines the differences in restrictions on the small clause complement and the sentential complement of *seem*.

Consequently, these two environments have been excluded as tests for gradability. The distribution of nouns in these contexts cannot be used evidence in favour of positing a gradable structure in their semantics or of a degree projection in their syntax. The two case studies addressed in this chapter have also shown how various factors may conspire so as to make believe that gradability and degree are involved. In the coming chapters this will turn out to be a recurring theme.

Chapter 3 DEGREES AND KINDS

1 Introduction

As indicated in chapter 1 (§2.1.2), it has been claimed in the literature that the use of *such* as an exclamative and with result clauses is restricted to the class of gradable nouns (cf. Bolinger 1972, Matushansky 2002b). Consequently, co-occurrence with this so-called "degree", or "intensifying", *such* has been used as a test for gradability. This view is supported by facts such as those illustrated in (1) and (2):

(1) a. *He is such a person!
b. *He is such a person that I cannot trust him.

(2) a. He is such an idiot!
a'. He has such courage!
b. He is such an idiot that no one will hire him.
b'. He showed such courage in battle that he was awarded the highest distinction.

The examples in (1) show that *such* cannot be used exclamatively or with a result clause when the noun is an ordinary, non-gradable one. Such structures are grammatical when a gradable noun is used, as in (2). These examples are claimed to get an interpretation in terms of the high degree to which the property denoted by the noun (*idiot*, *courage*) holds. At first sight, therefore, *such* looks like a typical degree operator.

In addition nouns like *idiot*, *genius*, *(jazz) enthusiast*, *nonsense*, *courage* etc., which are typically considered to be gradable, *such*-exclamatives and result clauses are also allowed with nouns receiving stereotypical interpretations, which are often, but not always, figurative (cf. discussion in §2.1.2 in chapter 1). This is illustrated in (3):

(3) a. He is such a linguist! (he'd ask for grammaticality judgments even while the plane he's on is being hijacked!)
b. Their new place is such a palace!
c. Those '50s Cadillacs were such boats! (you couldn't ride in them for a few minutes without getting sick!)

Application of the various gradability tests discussed in chapter 1 to the classes of nouns illustrated above yields different results. Nouns like the ones illustrated in (2) have been shown to come out as gradable according to the other tests reviewed too, while nouns like those in (3) give rise to diverging results. Take modification by degree adjectives, for instance. The examples in (4) show that nouns which categorize individuals via a (gradable) property, such as *idiot*, *genius*, *(jazz) enthusiast* etc., and abstract mass nouns naming (gradable) properties, such as *courage*, *generosity* etc., can be modified by adjectives like *big* in a degree sense:

(4) a. He's a big idiot.
b. He has great courage.

The interpretation of these examples seems to be in terms of the high degree to which the property denoted by the noun holds of the individual, parallel to the interpretation obtained when a degree modifier is used with a corresponding adjective, as in *very idiotic* or *very courageous*.

In contrast, nouns like *linguist* and *palace* cannot be so modified: the resulting interpretation of (5) is fundamentally different:

(5) a. a big linguist
b. a big palace
c. a big boat

In (5), the adjective *big* can only be interpreted in a literal sense, referring to size (either concretely, or, more abstractly, to importance), not in a degree sense that would parallel the interpretation in (4) above. The type of interpretation the nouns *linguist*, *palace*, *boat* receive in (3) in the context of *such* is not available when they are modified by adjectives. The same results with respect to modification by degree adjectives are obtained with ordinary, non-gradable nouns like *person*:

(6) a big person

In sum, there are nouns that come out as gradable according to both tests (e.g. nouns like *idiot* and *courage* etc.) and nouns that fail both tests and hence come out as non-gradable (e.g. *person* etc.). There is, however, also a class of nouns, namely those illustrated in (3), which qualify as gradable according to the *such* test, but which pattern with non-gradable nouns with respect to the modification by degree adjectives such as *big*. The question then arises where this contrast between the results of the two tests stems from. There are two possible sources. It could be that one of these tests is too lax and takes in too many nouns, or it could be that the other test is too strict and filters out nouns that it should not. In other words, one of the two is not a fully reliable test for gradability.

In addition to the "degree" *such*, illustrated in (2)-(3) above, there is also another instance of *such* which can be used anaphorically or deictically and gives rise to neutral type-interpretations paraphrasable as 'of this type/ kind'. This is the "kind" *such*, which can be used with all types of nouns: both non-gradable nouns (for which

it is in fact the only one available) and gradable nouns, as in (7)a and (7)b, respectively.

(7) a. Such a person will always fail to do the job properly.
b. Such an idiot will always fail to do the job properly.

An example like (7)b is said to be ambiguous between the two interpretations, i.e. 'someone who is idiotic to a high degree' or 'an idiot of this kind' (cf. Bolinger 1972).

In this chapter, we will show that the distribution of "degree" *such* is not limited to gradable nouns, or nouns that can be modified by other (potential) degree modifiers, and that the interpretation is also not in terms of degree. We will argue that all instances of *such*, including the so-called "degree" *such*, are in fact cases of kind-reference. What accounts for the differences in distribution (and interpretation) between (1), on the one hand, and (2)-(3), on the other, is that *such* here comes with particular semantic requirements concerning the construal of (sub-)kinds it can select, and these are only satisfied by certain types of nouns. This approach will enable us to solve the problematic aspects that arise from an analysis of *such* as a degree operator in contexts like those illustrated in (2)-(3) above, such as the contradictory results obtained if *such* is used as a test for gradability as compared to other tests, as well as other issues that will be discussed in the coming sub-sections. A major consequence is that co-occurrence with *such* in exclamatives or with result clauses is not a test for gradability. This means, more generally, that the distribution and interpretation of *such* cannot be used as evidence in favour of the existence of gradable structures in the semantics and/or syntax. It does not exclude the possibility that some nouns may be gradable, given that, at least intuitively, it seems to interact in particular ways or with particular effects with nouns that seem to encode a gradable property in their meaning. However, to verify the linguistic reality of such gradable structures, even in a subset of the cases, additional, independent tests will be needed.

The chapter is structured as follows. In section 2 we will offer some background information concerning the "classical" approach to the two *such*'s, reviewing and shedding doubt on some of the arguments that have been used in favour of postulating two fundamentally different lexical items, such as the distribution of *as*-clauses and result clauses. We will also present the semantics of the kind-referring *such* which has been proposed in the literature, and which we will use as a basis for our analysis. The proposal will be given in section 3, and in section 4 we will discuss some consequences of this approach. Section 5 briefly examines other constructions in the light of the proposal made for *such*, namely *wh*-exclamatives and *quite*-structures, which have often been analysed on a par with "degree" *such*. Section 6 concludes.

2 Background

2.1 The two *such*'s in literature

In the literature on *such*, a distinction is generally assumed between two different lexical items: the "kind" *such* and the "degree" *such* (Bresnan 1973, Carlson 1977, Siegel 1994, Landman 2006 etc.), which differ in interpretation as indicated above, as well as in chapter 1. In this sub-section, we will briefly review the observations which have motivated the split between the two, as well as introducing some arguments in favour of a unified analysis, which we will be pursuing.

Firstly, differences are argued to exist with respect to the types of nominals they may modify: "degree" *such* is claimed to only be available with gradable nominals (e.g. *mess*, *mistake*, *loudmouth* etc.), while kind *such* is not subject to this restriction (Siegel 1994, Landman 2006 etc.). In addition, "degree" *such* is assumed to be able to also modify (attributive) adjectives. That is, for the cases of NPs that contain adjectives, as in *such strange theories*, the dominant view is that *such* is in fact a degree operator that modifies the adjective, though subsequent raising to the DP periphery obscures the syntactic relation between *such* and the adjective (cf. Matushansky 2002a, Meier 2003 etc.).

Secondly, a difference is claimed to exist with respect to the types of subordinate clauses they may correlate with: when *such* occurs with a result *that*-clause, only its degree reading is available, while when it occurs with an *as*-clause, only its kind reading is available (Bolinger 1972, Landman 2006 etc.):[117]

(8) a. He is such a fool that I cannot trust him!
b. Such women as we met yesterday are a credit to society.

Thirdly, there are differences in the restrictions on their co-occurrence with determiners and quantifiers (Bresnan 1973, Carlson 1977, Siegel 1994, Wood 2002, Landman 2006). Thus, only kind *such* may occur between a determiner or quantifier (e.g. cardinals, *few*, *most*, *many* etc.) and a noun, or between an adjective and the noun, as illustrated in (9)a and (9)b respectively. Degree *such* cannot occur in these positions, as illustrated in (10). But both may occur with bare plural NPs and with the singular indefinite, as illustrated in (11), and neither can co-occur with a definite determiner (including possessives), as illustrated in (12).

(9) a. some/ few/ all such dogs [kind]
b. two new such problems

(10) a. *some such idiots [intended: degree]
b. *two friendly such idiots

(11) a. such mistakes [kind, degree]

[117] Example (8)a is from Bolinger (1972), and example (8)b is from Carlson (1977).

b. such a scholar

(12) a. *the such scholar [kind, degree]
b. *such the scholar
c. *my such mistakes

Finally, the two *such*'s have been claimed to be pronounced differently (Carlson 1977, Landman 2006): "degree" *such* always bears a pitch accent or a particular stress contour, while kind *such* may, but need not.

As it turns out, however, the distinction between the two *such*'s is not as clear-cut as it might look at first sight. It will be shown in the coming sub-sections that the above arguments do not constitute solid reasons to postulate a radical split, and that the facts may be explained in an alternative way. In addition, there are some clear arguments in favour of pursuing a (more) unified analysis.

It has already been indicated that the view that one *such* is a degree operator, which can thus be used to test for the gradability of the expressions it can modify, faces problems once one compares the results yielded by this diagnostic with the results obtained by applying other gradability tests.

A more indicative fact is that, in language after language, the kind-reading and the degree-reading are both associated with the same lexical item: French *tel*, Italian *tale*, Romanian *asemenea*, Polish *taki*, German *solch*- etc. Here are a few examples:

(13) a. un tel homme [French]
a such man
'such a man'
a'. un tel idiot (que…)
a such idiot (that…)
'such an idiot (that…)'
b. un asemenea om [Romanian]
a such person
'such a person'
b'. un asemenea idiot (că…)
a such idiot (that…)
'such an idiot (that…)'
c. ein solcher Mann [German]
a such man
'such a man'
c'. ein solcher Idiot (dass…)
a such idiot (that…)
'such an idiot (that…)'

This suggests that the two are closely related, certainly in a more direct way than one is led to believe by most of the analyses put forth in the literature; we indeed take this as an indication that a common semantic core should be sought.

There have been few attempts in the literature to provide a unified account for all the instances of such items, which focus either on the pro-form behaviour of such expressions, or on the sorts of entities they refer to (i.e. kinds).

Cross-linguistically, equivalent items can be seen to get a high degree interpretation, under which they can take result clauses and be used as exclamatives, as well as exhibiting demonstrative-like behaviour, which seems to cross-cut the distinction between kind and degree and includes deictic, anaphoric, and cataphoric uses. This is the type of observation that prompts Umbach (2007) and Umbach and Ebert (2009) to argue that German *so* is uniformly a demonstrative modifier. While this is an interesting proposal and goes a long way towards a unified analysis, it is not unproblematic and distinctions still remain. Most importantly, *so* still refers to a property in some cases, and to a degree in others.

Some tentative suggestions taking a different perspective, which in fact comes close to the view that we will adopt, can be found in Landman and Morzycki (2003) and Landman (2006). The basic observation here is that, cross-linguistically, in addition to the usual kind interpretations they get in the nominal domain, items equivalent to English *such/ so* (e.g. German *so*, Polish *taki* etc.) can receive either manner interpretations or degree interpretations when used in the verbal and adjectival domains. They suggest that all these uses might plausibly be unified under the kind umbrella. They argue that, similarly to how kinds of individuals are made use of in the nominal domain, in the verbal domain, manners are construed as kinds of events, and suggest that, in a parallel way, one could try to map degrees as kinds of states. So what will differ is the sort of kinds referred to, namely kinds of individuals, kinds of events and, possibly, kinds of states. However, they do not attempt an explicit analysis in this direction, and they do not directly address the degree interpretations of *such* in the nominal domain.

In this chapter, we will argue that the so-called "degree" *such* is in fact not a degree operator, and that all the uses of *such* share a common semantic core which consists of kind-reference. Before making a more explicit proposal, we need to better understand the semantics of kind-reference associated with *such* and to show that a fundamental distinction between two unrelated *such* lexical items cannot be maintained. This is what the next two sub-sections aim to do. In §2.2, we will briefly look at how kind *such* has been approached in the literature; this discussion is meant to provide us with some basic tools we can make use of in the remainder of the section. In §2.3 we will question one of the major arguments in favour of the proposed distinction, namely the distribution of result clauses and *as*-clauses.

2.2 The semantics of kind *such*

In this sub-section we will present the main views in the literature on kind *such*. We cannot fully evaluate all the existing approaches here, or cover all the issues related to the semantics of *such*. The aim is mainly to introduce some tools that will help make the discussion in the next sub-sections more concrete.

Kind *such* has been analysed in the literature either as an anaphor to kinds or as an anaphor to properties. The former view is most notably expressed by Carlson

(1977), followed by Wilkinson (1995), Landman and Morzycki (2003), Landman (2006) etc., while the latter view is upheld by Siegel (1994).[118]

Carlson analyses kind *such* as a kind anaphor: *such* means 'of kind *k*', where *k* is some contextually salient kind. Thus, *one such dog*, for example, means 'one dog of that kind'. His main argument in favour of this analysis comes from the observation that the antecedents of *such* must be [or rather: contain] "modifiers that delineate a KIND of the nominal modified" (Carlson 1977:233); expressions which cannot denote kinds do not make good antecedents. This is illustrated by the contrasts between (14) and (15) below, where italics indicate co-reference following Carlson (1977):

(14) a. *Cats without tails… such* cats
b. *People who eat fish… such* people

(15) a. *People in the next room…* ??*such* people
b. *Elephants that are standing there…* ??*such* elephants

In fact, *such* does not just refer back to the modifier, but rather to the whole NP. This is most clearly shown by examples like the following, where the noun contained in the antecedent and the noun modified by *such* are different, but this is taken to be the case in general.[119]

(16) "*Honest money lenders?* There are no *such* people."

Carlson also points out that the NP referred to must be a sub-kind of the kind that corresponds to the noun that *such* modifies, as shown by the following contrasts (italics are used here again to indicate co-reference):

(17) a. *mammals… such* animals
a'. **animals… such* mammals
b. *vicious dachshunds… such* dogs
b'. **vicious dogs… such* dachshunds

Carlson analyses kind *such* as being syntactically a CN-external AP. An AP is, in his analysis, a phrase consisting of an adjective and what he calls an adjectival determiner, i.e. a degree word, such as *fat enough* or *more beautiful*. Semantically, *such* is translated as an expression of category CN'/CN containing a free variable that ranges over kinds, with the qualification that the free kind variable has to be interpreted as a kind subordinate to the one that corresponds to the CN that *such* modifies. The context of use (the assignment of values to variables) will assign any possible denotation to the free variable. (Carlson 1977:234) The translation of *such* proposed by Carlson is given in (18), where Q is the variable which will receive the value of the CN that *such* modifies, x^k is the free kind variable, and R' is the

[118] For more syntactically-oriented work on *such*, see Bresnan (1973), Wood (2002), Wood and Vikner (2011).
[119] The example in (16) is from Carlson (1977).

realization relation that holds between object-level individuals (those superscripted ^{o}) and the kinds they instantiate (the elements superscripted ^{k}):

(18) $\lambda Q\ \lambda x^{o}\ [[\forall z^{0}\Box[R'(z^{o},x^{k}) \rightarrow {}^{\vee}Q(z^{o})]\ \&\ R'(x^{o},x^{k})\ \&\ {\sim}\Box{\sim}\exists y^{o}[{}^{\vee}Q(y^{o})\ \&\ {\sim}R'(y^{o},x^{k})]]$

This denotes the set of properties that hold of a set of objects that realize some contextually-specified kind, represented by x^{k}, with the condition that all objects that realize x^{k} must be a subset of whatever value is assigned to Q. But while Q must hold of all object-level realizations of x^{k}, not all objects that Q holds of must be realizations of x^{k}.

In (19) we give the translation of *such dog(s)* as an illustration of a CN derived by applying *such* to a CN, here *dog* (omitting the final conjunct, which ensures the kind is subordinate):

(19) $\lambda x^{o}\ [\forall z^{o}\Box[R'(z^{o},x^{k}) \rightarrow \mathbf{dog}(z^{o})]\ \&\ R'(x^{o},x^{k})$

This is the set of objects that realize whatever kind is assigned to x^{k}, such that for all objects it is true that at all points of reference if that object realizes that kind then it is a dog, which is the value assigned to Q in this case (so x^{k} must be some kind of dog(s)). The value assigned to x^{k} might be Afghan hounds, shepherd dogs, bull terriers, Chihuahuas, guardian dogs, companion dogs, longhaired dogs etc. Any of these can be referred to with the phrase *such dogs*. What could not possibly be assigned as a value of x^{k} is any kind that does not have all of its realizations as dogs, for example toy dogs.

In sum, although *such* itself is of a higher type, the variable it contains is a kind variable and it is of type <*e*> since kinds are modelled as a special type of individual in D.[120]

Differently from Carlson, Siegel (1994) argues that kind *such* is simply a pro-form for an adjective, i.e. it is a simple variable ranging over one-place predicates, formally $v_{n,\ <<s,e>t>}$. On her account, *such* is syntactically a simple adjective and semantically it is bound by the translations of (complex or simple) common noun phrases, not by those of adjectives or Carlson's kinds. Her main argument comes from the type of antecedent she claims *such* can have. While she agrees that it is much easier to imagine using *such* to refer back to expressions which represent kinds of things than it is using it to refer back to those which do not, she points out that "this preference of *such* for kind modifiers seems to have more to do with how *such* is usually used than with its structure; the preference is not in fact strong enough to encode in the grammar by making the free variable in the translation of *such* a kind variable. We CAN get good sentences in which *such* is bound by

[120] Note that there are also mechanisms to construe kinds as individuals out of (sets of) properties – cf. Chierchia (1998).

modifiers that definitely do not delineate kinds." (p. 488)[121] She provides the following examples to support this claim:

(20) a. The elephants that are standing there are useless; I can't get an exciting picture with such animals.
b. Ned is sound asleep; I'm not going to call on such a student.
c. Hallie is two rooms away; I can't carry on a conversation with such a person.

Based on these examples, where *such* does not have a kind-referring expression as an antecedent, Siegel concludes that *such* is an anaphor to properties/ one-place predicates, not to kinds. However, we would like to suggest that the kind analysis can be maintained even in view of the above examples.

It can be argued that, at the point where *such* is interpreted in these examples, a contextually salient kind is construed which it can refer to. That is, the *such* DPs in (20) are also interpreted as 'animals of this kind', 'a student of this kind', and 'a person of this kind', respectively. What is different is that here the kind referred to is not explicitly specified, but has to be "reconstructed" from the preceding clause based on information provided by the subject DP in combination with the predicate, and possibly some extra-linguistic knowledge as well. Namely, it is the kind instantiated by the individual (referent of the subject DP) as described by the predicate in that clause. So what is obtained would be something like 'the kind of elephants that just stand uselessly/ uninterestingly', 'the kind of students who are/ tend to be sound asleep (probably at inappropriate times)', 'people/ colleagues who are too far away (to have a conversation with)'. This is in fact similar to certain cases

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[121] Siegel (1994) also argues that her analysis of *such* as bound by the translation of a CN provides a natural explanation for the special proviso in Carlson's translation of *such* "that all objects that realize x^k are a subset of whatever value is assigned to *Q*" (Carlson 1977:234), which is meant to account for the contrast in (i) (the examples are from Siegel 1994):

(i) a. *Small mammals* are afraid that people like to eat *such* animals.
b. **Small animals* are afraid that people like to eat *such* mammals.

She argues that (ia) is fine because 'small mammal animals' makes sense, and the sentence means that small mammals are afraid that people like to eat small mammals, not just any small animals. (ib) is odd because a 'small animal mammal is redundant'. Thus, Siegel argues that the limitation of the kind variable to subsets of the objects picked out by the head noun of the *such* nominal which is required on Carlson's account, and which she regards as arbitrary, follows naturally from normal pragmatic rules if *such* is translated by CN meanings. It may be that this limitation is indeed pragmatic in nature, and may even be overruled under certain circumstances. Landman (2006) in fact provides the following counterexample (which prompts her to drop this condition altogether):

(ii) *Longhaired dogs* can be difficult to brush. *Such* cats are even worse.

Cats cannot be a sub-kind of dogs, but the example is nevertheless grammatical according to Landman.

However, it seems that focus-related/ contrastive stress also plays a role in the acceptability of certain examples. For instance, stress seems to be needed on *cats* in (ii), where two co-hyponyms are used (*dogs*, *cats*) instead of the more usual, and most easily interpretable, subordinate-superordinate relation (*mammals*, *animals*). And examples like (ib) above, where this relation is reversed, may in fact also be improved by stressing the N modified by *such* (i.e. *mammals*). Similar cases exist which do not involve *such*, like (iii) below, where we have used capitals to indicate stress:

(iii) Small animals are afraid that people like to eat small MAMMALS.

Contrastive focus therefore seems to be able to influence the relation between *such* DPs and possible antecedents. This is an aspect which deserves further research.

already discussed by Carlson, such as (21) below, where the kind referred to by *such* is understood to be the kind instantiated by the elements the subject NP refers to:

(21) a. with *politicians*, *journalists* and other *such* important personages…
b. Though *the wheel* and *the lever* were known to the ancient Babylonians, *such* devices were unknown to the inhabitants of the North American continent.
c. I met *an old-style structural linguist* the other day. *Such* people become rarer in academic fields as well, I'm told.

Carlson provides these examples to show that *such* need not have specifiable linguistic antecedents but that it can even have a denotation which cannot be related directly to another expression of English. In spite of this, the examples are perfectly interpretable, and speakers understand, for instance, that the *such* DP in (21)a refers to other persons that are of the same kind of important person as journalists and politicians (though there is no exact specification of this particular kind), and that in (21)c *such* refers to the kind of person that an old-style structural linguist is (whatever that may be exactly).

Therefore, while in the examples in (14) there is an explicit kind-referring expression that functions as a straightforward antecedent, in (20), just as in (21), the kind that is to be picked up by *such* has to be construed based on the content of the preceding clause (and, possibly, also assigned on the basis of speakers' knowledge of the world – cf. Carlson 1977).[122] In conclusion, the kind analysis of *such* proposed by Carlson can be maintained, and can also account for the apparent counterexamples provided by Siegel.

The mechanism at work in examples like (20)-(21), where a contextually salient kind is constructed from an individual that instantiates (or exemplifies) it, is in fact similar to that involved in the interpretation of *as*-clauses, or phrases, which *such* may co-occur with, and which represent yet another way the kind variable can receive a value:[123]

(22) a. Such women *as we met yesterday* are a credit to society.
b. Such women *as Frieda* should be paid more handsomely.

Carlson (1977) takes the function of these clauses/phrases to be one of exemplifying the kind, where a specific individual or set of individuals can be picked out and pointed to. On his account, the semantic rule associated with the presence of an *as*-clause in the structure creates a predicate out of the *as*-clause which has as argument

[122] This type of accommodation is also found elsewhere: for instance, in the interpretive mechanisms involved in certain types of pronominal anaphora, such as E-type pronouns, pronouns of laziness, plural pronouns with split antecedents etc. Some examples are given below:
(i) a. John owns *some sheep* and Harry vaccinates *them* in the spring. (Evans 1980)
b. The only man who ever stole a book from Snead made a lot of money by selling it. (Geach 1964) [where *it = the book that he stole from Snead]*
c. *Mary* met *Sue* around noon yesterday; *they* had lunch together.
d. You take two wings, put them together on a broom-stick, and *it* will never fly. (Parsons, in Carlson 1977)

[123] The examples in (22) are from Carlson (1977).

the free variable in the matrix occurrence of *such*, and finally gives a derived phrase of type $<e^o,t>$. That is, a phrase like *such women as we met yesterday* is a set of properties of objects, namely the property set associated with any object that is a realization of a kind, represented by the free variable x^k, which is *woman*, in this example. But there is an additional restriction here on the interpretation of x^k stemming from the presence of the *as*-clause: it can only be assigned a value from the domain of kinds such that it is not only some kind of woman, but also a kind of woman that we saw yesterday. For cases like (22)b, where *as* is only followed by a DP, he adopts a more straightforward treatment. Namely, phrases like *such women as Frieda* are interpreted as 'women that are of the same KIND as Frieda'. This is the set of properties associated with all objects that are realizations of x^k, x^k being some kind of woman, and Frieda being a realization of that kind. There are additional issues that we cannot go into here, such as the (internal) syntax of *as*-clauses and *as*-phrases (including the question whether the latter are just reduced versions of clausal structures, a question that also applies to comparatives), and the question whether *as*-clauses/phrases help identify the kind associated with *such*, by providing a restriction on its kind variable, or whether they directly supply *such* with the value of its kind variable, in which case they would be construed as definite descriptions of a kind, analogous to some analyses of *than*-clauses/phrases in comparative constructions – see Carlson (1977) and Landman (2006) for relevant discussion.

This concludes the discussion of the semantics of kind *such* as it has been treated in the literature. We will retain that it picks up on kind descriptions and its semantics can be defined in terms of a kind variable, which can receive a value by co-reference with an antecedent when used anaphorically, from the (extralinguistic) context when used deictically, or in correlation with an *as*-clause/phrase. With these notions in place, we will now turn to a consideration of an issue that is of particular relevance for the fundamental division between the two *such* lexical items that is usually made, an issue that has been partially touched on in this sub-section too. Namely, the distribution of *as*-clauses/phrases and result clauses.

2.3 *As*-clauses and result clauses

As already noted, a major difference observed between kind *such* and "degree" *such* refers to the type of clauses they can correlate with: *as*-clauses and result clauses, respectively. The following examples illustrate the claimed restriction of *as*-clauses to the kind reading of *such*, and that of result *that*-clauses to its degree reading:[124]

(23) a. Such women as we met yesterday are a credit to society.
b. He is such a fool that I cannot trust him!

This generally accepted correlation has accordingly guided the analyses of these types of clauses. Thus, *as*-clauses have been analysed in the context of accounts of kind *such*, as was shown in the previous sub-section. They can be taken either to directly supply the kind associated with *such*, or to help identify it by providing a

[124] Example (23)a is from Carlson (1977) and (23)b from Bolinger (1972).

restriction on the kind variable associated with *such* (cf. Carlson 1977, Landman 2006). Result clauses, on the other hand, have been analysed as arguments of the degree operator, in a parallel way to the infinitival clause correlated with *enough* or to other degree constructions involving correlate subordinate clauses (cf. Meier 2003).

In this sub-section, however, we show that, in fact, the distribution of *as*-clauses and result clauses is not a solid argument in favour of postulating two fundamentally different lexical items that would each be specified as selecting one or the other. There are two (empirical) arguments supporting this claim: on the one hand, we may find *as*-clauses with high degree readings of *such*; on the other hand, result clauses seem to be possible with neutral, kind interpretations of *such*. The following examples illustrate the former point:[125,126]

(24) a. It is really a joke to try to reason with such an idiot as you![127]
b. How can you expect such an idiot as I am to say anything but idiotic things?[128]
c. It was such a quantity as you would hesitate to accept.

In (24)a and (24)b, *such an idiot* can be interpreted as 'so (very) idiotic' and, at the same time, a comparison is made: 'as idiotic as you/ me'. In connection with (24)c, Bolinger (1972) points out that the example can get either a kind or a degree interpretation. In fact, it is hard in these examples to distinguish between a degree reading and a kind reading.

Conversely, result clauses seem to be possible with neutral, kind interpretations of *such*, both in its usual attributive use, as in (25), and in predicative position, as in (26):

(25) a. The statute defining this offence imposes punishment on any person who wilfully or unlawfully causes or permits any child under the age of sixteen years to be placed in such a situation that the life or limb of the child is endangered…[129]

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[125] Note that there is also a different type of *as*-clause, infinitivals, illustrated in (i). These *as to*-clauses should be distinguished from regular *as*-clauses and are in fact more similar to result clauses. It should be noted, however, that in the proposal we will make in section 3, result clauses will be in fact analysed as identifying a particular sort of sub-kind too.

(i) a. Next time I won't be such an idiot as to put the wrong barring password in three times.
b. "What!" says Jack's mother, "have you been such a fool, such a dolt, such an idiot, as to give away my Milky-white, the best milker in the parish, and prime beef to boot, for a set of paltry beans?!" (Jack and the beanstalk)
c. They got out £600 from a card with my name on it; but who would be such an idiot as to let them use it?
d. She was not such an idiot as to believe what he was saying.

They are also similar to the infinitival complements which certain nouns or adjectives can take and which are used to give a reason for passing a judgment:

(ii) You are a fool to believe such a thing!

[126] Example (24)c is from Bolinger (1972).

[127] Source: http://www.wallstreetsurvivor.com/CS/forums/t/39082.aspx

[128] Source: W. M. Thackeray – *The Virginians*

[129] Source: http://www.jud.ct.gov/ji/criminal/part6/6.11-1.htm

b. It's ridiculous that our footballers should be put in such a situation that there is a possibility of serious injuries.[130]
c. …the act must be of such character and done in such a situation that the actor should reasonably have anticipated that some injury to another would probably result.[131]
d. To organise society in such a way that every member of it can develop and use all his capabilities and powers in complete freedom and without thereby infringing the basic conditions of this society.[132]
e. Live in such a way that you would not be ashamed to sell your parrot to the town gossip.[133]
f. I found myself surrounded by such circumstances and such people that I knew not whom to trust.[134]

(26) a. The employment situation of Singapore in the 1960s was such that workers found themselves in a position where they could not be choosy.[135]
b. The disease was such that no treatment was possible...[136]
c. … the hat that lay by him on the floor (he was the only one uncovered) was such that if one had considered it as an article of mere personal adornment he would have missed its meaning.[137]
d. Public opinion in Finland during the spring 1941 was such that it would have been extremely difficult for any government to explain…[138]
e. The design of the portable tank was such that the bottom of the valve structure, vent fittings and shell insulation all sat below the line…[139]

These facts indicate that the distribution of *as*-clauses and result clauses is wider than usually claimed and cross-cuts the distinction between the neutral, kind and (high) degree interpretations of *such*. This may be taken to suggest that the noted distinction may simply be a matter of preference. That is, it may be that result clauses are particularly (but not exclusively) felicitous when the main clause expresses a situation which may be easily conceived of as entailing some sort of consequence; this is the case, for example, when there is an expression of high degree, especially one implying excess. Looking at the facts in this way might help us begin to understand the privileged relationship between the expression of (high) degree and result clauses, as it is manifested cross-linguistically (i.e. result clauses are more often than not associated with expressions of [high] degree), in spite of the fact that consequence is not necessarily, logically speaking, dependent on an expression of (high) degree.

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130 Source: http://education.theage.com.au/cmspage.php?intid=135&intversion=31
131 Source: http://www.4lawschool.com/torts/williams.htm
132 Source: http://www.marxists.org/archive/marx/works/cw/volume06/footnote.htm#69
133 Source: Will Rogers, US humorist and showman (1879 – 1935) (at http://www.quotationspage.com/)
134 Adapted from http://www.state.il.us/HPA/facsimiles.htm
135 Source: stars.nhb.gov.sg/stars/tmp/ygce19810811s.pdf
136 Source: http://www.eyewitnesstohistory.com/plague.htm
137 Source: A. Bierce – *Can such things be?* (http://bierce.thefreelibrary.com/Can-Such-Things-Be/22-1)
138 Source: http://www.kevos4.com/Part13 Was the Continuation War Unavoidable.htm
139 Source: www.unece.org/trans/doc/2008/ac10c3/ST-SG-AC10-C3-2008-47e.doc

We can conclude at this point that the distribution of *as*-clauses and result clauses cannot be used as an argument in favour of a split between two different lexical items, a kind-referring expression and a degree operator: their distribution does not coincide with this interpretation-based distinction.[140] The exemplifying function of *as*-clauses and the consequential meaning of result clauses do not correlate with or depend on one or the other interpretation of use of *such*. However, it is still the case that e.g. result clauses are not generally available with *such* (e.g. **He's such a person that I cannot trust him.*). Understanding the contribution of result clauses will be instrumental to providing a comprehensive account of the semantics of *such*, as will become clear when we present our proposal in the next section.

3 The proposal

In this section we aim to show that the kind analysis of *such* discussed in §2.2 can be extended, with some adjustments, to the cases which have been claimed to be instantiations of the "degree" *such*, i.e. those cases where *such* can take a result clause or be used in an exclamative. We will argue that *such* is not a degree operator in these cases, but that it makes reference to salient inherent sub-types which are identified by natural consequences.

In §3.1 we will present the main ingredients of the analysis and introduce the basic notions we will be employing, namely that of salient sub-type and natural consequence, which will be used in accounting for the distribution and interpretation of *such* in conjunction with the contribution of result clauses, which we take to be key to a full understanding of these cases. Sub-sections 3.2-3.4 will offer the details of the analysis as applied to the various classes of nouns that are compatible with this use of *such* and result clauses. In §3.5, we will examine an additional meaning aspect, having to do with the expression of 'unexpectedness', on the basis of some preliminary data concerning the intonation of these DPs.

[140] There are two other differences which have been claimed to exist between "kind" *such* and "degree" *such*. One concerns register: while "degree" *such* is common in both informal and formal speech, "kind" *such* is of a formal register (Bolinger 1972, Landman 2006). This probably has to do with the (non-)existence of alternative structures that compete with *as*-clauses and result clauses. For *such* + *as*-clause structures there are at least two alternatives. One is to use the noun *kind* and a relative clause (e.g. *the kind of women who...*), the other is to use *like*-structures (e.g. *women like this/ those*), and these are strongly preferred in the informal register. There is, however, no possible way to replace the *such* + result clause structure. The second difference, which has been mentioned in §2.1 and which we will come back to in more detail in §3.5.2, concerns intonation: it has been claimed that "degree" *such* always bears a pitch accent or a particular stress contour, while kind *such* may, but need not (Carlson 1977, Landman 2006). As it turns out, however, the special intonation is not obligatory and is only found in a subset of cases – namely, in exclamative uses, where a result clause is not overtly present. It seems, therefore, that both these differences are related to the difference between structures with *as*-clauses vs. result clauses, rather than to a difference between kind and degree per se.

3.1 Salient sub-types with natural consequences

In this section we introduce the basic ingredients of our proposal. We analyse the cases where *such* can take a result clause or be used in an exclamative not as involving a degree operator *such*, but as also involving reference to (sub-)kinds, though this is achieved somewhat differently. The details of the analysis will be made more specific based on the three case studies in §3.2-3.4. An additional aspect will be discussed in §3.5.

We argue that the licensing of *such* (+ result clause) structures is subject to a double condition: (i) they must contain a noun that makes salient sub-types inherently available and (ii) these must be sub-types that can be identified by natural consequences (which can be expressed by result clauses).

While in the ordinary anaphoric or deictic cases *such* picks up a sub-type by co-reference with an explicit or implicit antecedent, here *such* needs to pick out a sub-type internally to the DP in which it occurs (but see a refinement of this in §3.3). Therefore, in the former case, a property which is external to the meaning of the noun is added in order to perform (more specific) divisions within the domain, resulting e.g. in subsets of individuals that have the respective property vs. those that do not. In this way, (different) sub-kinds can be delineated. Such externally determined sub-types are generally available with any noun. In the latter case, this operation is effected internally to the *such* DP, and *such* picks out a salient sub-type which is delineated not by an external criterion, but only by what the nominal itself expresses, in correlation with the result clause (where one occurs). Therefore, the meaning of the noun needs to be such that it allows discriminating among potentially different sub-types of N, without resorting to extrinsic properties. That is, it must contain a salient criterion for inherently distinguishing among possible sub-types so as to make salient sub-types easily accessible; in addition, these must be sub-types that can be associated with natural consequences . We will refer to the instances of *such* present in this type of structures, i.e. with result clauses and in exclamatives, as "internal *such*", to distinguish it from the ordinary anaphoric or deictic kind *such*, henceforth "external *such*".[141] This difference with respect to how sub-kinds can be delineated and accessed determines the differences in distribution between external and internal *such*. The latter will only be possible with nominals which contain an intrinsic structuring principle, so that their domain is inherently differentiated in such a way that they make salient sub-types accessible that can be identified by natural consequences. This second part of the condition reflects on the possibility of using a result clause, which we argue correlates with the possibility of forming a set of possible natural consequences of belonging to a certain kind, which correspond

[141] The terminology used here is inspired by that used in works on *same*, which seems to have similar behaviour: it has a deictic or anaphoric use, where it has a contextual antecedent or is accompanied by an *as*-clause, as illustrated in (i), and a sentence-internal reading which is dependent on a plural or a universal DP (i.e. must be licensed), as illustrated in (ii) taken from Matushansky (2008) (cf. also Carlson 1987, Moltmann 1992, Dotlačil 2010):

(i) Alice bought the same book as Beth.

(ii) Alice and Beth bought the same book.

to, and as such identify, salient sub-types of that kind, that are inherently made available, as defined above.

Note that sub-kinds made available by taxonomic hierarchies, even though they may be quite salient cognitively (as in the case of nouns like *animal*, *lion*, *whale*, *bread* etc.), do not make good sub-types for internal *such* to pick. Although in the case of tigers one may easily think of a Bengali tiger or some other kind of tiger, the example below is not grammatical:

(27) *The local zoo now has such a tiger that all the other animals are afraid.

This is presumably because this sort of sub-kinds, based on natural classes, cannot be associated with and defined by natural consequences they would give rise to in a given situation.

To illustrate the gist of our proposal, consider the following pair of examples:

(28) a. *He is such a person that no one will hire him.
b. He is such an idiot that no one will hire him.

In these examples, *such* needs to pick out a sub-type of person and idiot, respectively, which is the operation it normally performs. However, it needs to do this relying solely on the lexical meaning of the noun in correlation with the result clause. In the case of *person*, there is nothing inherent to the meaning of the noun that can make salient sub-types available a priori. One always needs to make use of additional, extrinsic properties in order to delineate distinct sub-kinds of people. The noun *idiot*, on the other hand, which categorizes individuals in terms of a gradable property, easily prompts types of individuals that can be distinguished from one another in terms of their degree of idiocy. A 'high degree type' (i.e. a very idiotic or an extremely idiotic person) is a very salient sub-type of idiot, one naturally made available by the noun. In addition, being a sub-type of idiot, as defined by having a high degree of idiocy, can naturally determine one's chances of being hired. Therefore, this is a salient sub-type that can be identified by a natural consequence, and the [internal *such* + result clause] structure is licensed. There is, however, nothing inherent to being a person that can have as a natural consequence their being hired or not. Or at least it is rather unclear, or very vague, what kind of properties people have that would lead to the consequence that no one wants to hire them. So the consequence expressed by the result clause cannot be associated with being some salient, natural sub-type of person. Since a salient sub-type that can be identified by a natural consequence is not available, the example in (28)a fails (both aspects of) the condition on the licensing of the [internal *such* + result clause] structure.

In general, then, a result clause will be felicitous if it can express a possible natural consequence that corresponds to and identifies the salient inherent sub-types that internal *such* can pick out. The contribution of the result clause may be paraphrased by using an implication expressed by a conditional, as in (29), which will be made more precise in the coming sections:

(29) 'he is some (salient) type of idiot such that if someone is that type of idiot he cannot be hired'

In the account we are proposing, the contribution of the result clause is essential, due to the role natural consequences (which we take result clauses to express) have in identifying the salient sub-types that internal *such* can pick. It should be noted, however, that a result clause is not always overtly present. We take it that when a consequence is not explicitly expressed, it is still implicitly present and recoverable from the context of utterance. This is what happens in exclamatives, where this specification (i.e. the consequence) is suspended, or, in some sense, left hanging. Here the situation of utterance plays a major role, and non-verbal elements such as facial expressions, tone of voice, gestures etc. may give an indication as to what sub-type, defined by what consequence, the speaker might have in mind. This correlates with other differences that the exclamative use of internal *such* exhibits – see §3.5 for more discussion. Interestingly, however, the consequence may not always be left implicit, presumably because in certain cases the sub-type supplied by the noun is not specific enough without it. This is the case of *situation*-type nouns that will be discussed in §3.3.

We argue that such salient, inherent sub-types which can are identified by natural consequences are made available by several classes of nouns, namely (i) gradable nouns such as *idiot*, *courage* etc., (ii) nouns such as *situation*, *way* etc., and (iii) nouns that receive stereotypical interpretations. Our analysis, therefore, brings together these different types of nouns, which otherwise would rather puzzlingly pattern together with respect to distribution in internal *such* + result clause structures. Note also that nouns that are typically considered to be gradable, such as *idiot* or *courage*, which are the ones usually looked at when considering the so-called "degree" *such*, constitute only one of the relevant classes. In what follows, each of the three types of nouns will be discussed in more detail in §3.2-3.4. At the same time, the discussion in these sub-sections, especially in §3.2 and §3.3, will also shed more light on the contribution of result clauses and the related notion of natural consequence. Gradable nouns can most easily illustrate the approach we are adopting, which is why we will start spelling out the analysis on the basis of these cases in §3.2. However, they are also the ones that can be most easily accounted for under a degree analysis of *such*. It is rather when one comes to consider the other two classes of nouns that the advantages of our proposal become most evident. With *situation*-type nouns, especially, it is clearest that gradability plays no role. As such, they are most problematic under a degree approach to *such* (and result clauses). A similar argument in fact also applies to stereotypical nouns, which will be shown not to involve gradable meanings.

3.2 Case I: gradable nouns

One class of nouns that make available salient sub-types consists of nouns that are, at least conceptually, gradable. These are nouns which contain a (gradable) property in their lexical meaning, either in virtue of naming it, as in the case of abstract mass

nouns like *courage*, *wisdom*, *patience* etc., or by denoting individuals that are characterized by such a property, whether these are human individuals (as in the case of *idiot*, *genius*, *blunderer*, *liar* etc.) or non-human objects, either concrete or abstract (e.g. *bargain*, *effort*, *mistake*, *failure*, *success*, *blunder*, *masterpiece*, *stink*, *fragrance*, *boon*, *gyp*, *disaster*, *chaos*, *mess*, *modicum*, *smidgen* etc.). These nouns make certain sub-types salient and easily accessible to internal *such* – these are the sub-types including objects in the domain that have the defining property to a high degree. As already noted in the previous sub-section, a noun like *idiot*, for example, which categorizes individuals based on a gradable property, namely *idiocy*, easily prompts types of individuals that can be distinguished from the others in terms of their high degree of idiocy. Very idiotic people, i.e. "big idiots", constitute a salient sub-type of idiots that is naturally made available by the noun.[142] These salient sub-types inherently made available by gradable nouns may entail natural consequences that can identify them. In (30), belonging to, or manifesting, a sub-type defined by the high degree of idiocy and courage can naturally determine one's chances of being hired, or being awarded a distinction, respectively. So result clauses can be used to express consequences which naturally follow from a given individual being, or having, an instance of some salient sub-type of the kind *idiot* and *courage*, respectively.

(30) a. He is such an idiot that no one will hire him.
b. He showed such courage in battle that he was awarded the highest distinction.

These possible natural consequences which correspond to natural sub-types specify the sub-types in question. As already indicated, the contribution of the result clause may be paraphrased by using an implication:

(31) a. 'he is some type of idiot such that if someone is that type of idiot he cannot be hired'
b. 'he showed some type of courage such that if someone shows that type of courage he must be awarded the highest distinction'

This way of understanding the contribution of result clauses is very similar to Meier's (2003) analysis, which is, however, set in a degree-based framework. Meier analyses result clauses as denoting an incomplete conditional which is implicitly modalized by a modal with universal force (unless a different type of modal is overtly expressed) as if it were the consequent of a complete conditional. On her account, result clauses are arguments of the degree words *so/ such* which she treats

[142] Such sub-kinds can in fact also be explicitly delineated by degree adjectives like *big* in *big idiots*, for example, and then they may be available as antecedents to kind anaphors. Consider, in this context, the following example where *such* is used in its ordinary kind anaphor guise, but it just happens to pick up from the context a sub-kind of idiots delineated by the high degree of the property (in other words, one containing individuals that are ordered high with respect to their degree of idiocy, i.e. 'big idiots'):
(i) I didn't expect the tax office to employ *big idiots*. But John is *such* an idiot, and he's been working there for a couple of years already.
For an analysis of modificational structures of the type *big idiot*, see chapter 4 (section 2).

on a par with *enough*, in the sense that they both introduce a comparison relation (of the equative type: 'greater than or equal') between two degrees. Here is an example (where *e* stands for 'extent', which is how she defines degrees, as opposed to viewing them as points):

(32) a. The apartment had such a beautiful view that we rented it.
b. 'The (max.) *e* such that the apartment has a *e*-beautiful view ≥ the minimal *e** such that, if the apartment has a *e**-beautiful view, we *have to* rent it.'

Instead of relating result clauses to degrees/ degree operators, however, we take them to identify the salient sub-type that *such* picks out, by expressing a consequence that follows from the very nature (i.e. sub-type) of a given individual, relative to the situation in which it is a participant. So the result clause overtly contributes information specifying the sub-type. In the absence of a result clause the consequence that identifies the sub-type is left implicit; this is what happens, for example, in exclamative uses. The close relation which exists between the natural consequence expressed by the result clause and the sub-type to which it corresponds will become clearer when we consider *situation*-type nouns in the next sub-section. In order to represent the contribution of the result clause, we make use of an equivalence relation between sets. The interpretation will finally amount to matching the salient sub-type that is made available by the noun and that is to be selected by *such* with the sub-type defined by the natural consequence expressed by the result clause:[143]

(33) some sub-type of idiot x^k such that he is an x^k-idiot = a sub-type of idiot y^k such that, if someone is that type of idiot, no one will hire him

This way of understanding internal *such* + result clauses also enables us to capture the intuition that if the individual in question turned out to be even more idiotic, he would still not be hired. This is due to the entailments that hold. If *John is a bigger idiot than Peter*, then John is also a big idiot, i.e. he is also included in the set of big idiots (or: is an instantiation of the type of big idiots too). And if being a big idiot entails that no one will hire you, then a bigger idiot will be characterized by that consequence too.

From our discussion so far, it would seem that the meaning of the NP itself should be enough to make salient sub-types available, which can be associated with a natural consequence. And with a noun like *idiot* in (28)b this seems to be the case:

[143] Recall that we started out by represent the contribution of the result clause by means of an implication: $A \rightarrow B$. The implication relation can be given a set interpretation in terms of an inclusion relation between two sets: $\{x|A(x) \text{ is true}\} \subseteq \{x|B(x) \text{ is true}\}$. Given the ordering (hence, inclusion) relations that are assumed to exist in the domain of a gradable noun, it is not essential whether we define the relation between the two sets in (33) as "=" or as the less restrictive inclusion/ subset relation "⊆" (which would also more directly translate the "greater than or equal to" relation used in Meier's analysis); the two will give rise to the same result. However, the choice of the =-relation will turn out to be justified when taking into account *situation*-type nouns in the next sub-section. It will become apparent then that the natural consequence expressed by the result clause does not merely (further) specify the sub-type, but actually defines it.

simply being a sub-type of idiot (as delineated by a high degree of idiocy) is enough to give rise to a potential natural consequence and thus make the use of a result clause possible when the nominal is used in predicate position. But take an example where such a DP would occur in object position – e.g. *They hired such an idiot...* The consequence that the result clause will (at least preferably) express will bear not simply on him being some type of idiot, but rather on him being that type of idiot relative to the situation (i.e. him being hired). So the continuation would much rather be something like …*that the company went bankrupt within a month* than …*that he couldn't even tie his shoes properly*. The latter, however, would be ok in correlation with a predicative use: *He's such an idiot that he can't even tie his shoes properly*. This suggests that the consequence that defines the relevant sub-type is not completely established at the NP or DP-level, but is rather related to the situation as a whole, in which it is a participant – hence the definition we presented in the preceding paragraph. This may be obscured, however, when the nouns are used in predicative position, in which case there is no major difference between interpretation at just the DP-level and at the Pred (or higher) level. The requirement to be related to the situation rather than simply to the *such* DP will emerge more clearly in our examination of *situation*-type nouns. We therefore postpone a discussion of the mechanisms by which [*such* + result clause] can achieve the required scope to the next sub-section.

So far, the analysis we have proposed is not very different in coverage and predictions from a degree analysis, given that the salient sub-type being made use of is related to degree of a property (idiocy, courage etc.). In the domain of gradable nouns, the sub-type delineated by a high degree of the property seems to be the most salient and easiest to single out. However, degree becomes relevant rather indirectly, by making available a salient sub-type.[144] And it is a sub-type that internal *such* is looking for, not a degree (or an ordering determined by degree) as such. In the next sub-section, where we discuss *situation*-type nouns, it will in fact become clear that *such* cannot be analysed as a degree operator, whether on a degree-based or on a degree-less approach to gradability (cf. the discussion of the different approaches to gradability in chapter 1, §1.1). It will be in connection with that class of nouns that the advantage of adopting a non-degree approach to *such* and result clauses will be most obvious. While gradable nouns can be dealt with on either approach, with *situation*-type nouns gradability plays no role. As such, a degree approach to result clause structures cannot account for these cases.

[144] The role degree seems to play here as a salient criterion for inherently discriminating among potential sub-types within the domains of gradable nouns recalls the proposal made, in a different context, by Tovena (2001) in connection with abstract mass nouns naming qualities (e.g. *courage* etc.). Tovena proposes that it is the differing degrees of the property that allow distinguishing between different sub-types of the property: "a high degree and any other given degree of courage are different types of courage. It is the ordering that allows us to talk about sub-types, because we cannot distinguish them in any other way. […] The domain of [abstract mass nouns] is [weakly] discretised into degrees that are a sort of ordered species. […] Degrees identify types…" (Tovena 2001:575). This view is suggested by data which indicate that the default interpretation of such nouns is in terms of (sub-kinds distinguished by) the degree of the property when non-specific expressions (such as wh-words, or elements like English *a certain*, *such* and French *un certain*, *tel*) are used in the absence of any overt modification or any (explicit or implicit) antecedents in the discourse (see Van de Velde 1996, Tovena 2001 for relevant discussion).

3.3 Case II: nouns like *situation*, *way* etc.

In this sub-section we will examine a rather different class of nouns, which can only be seen as exceptional in other approaches, and show that the view of internal *such* proposed above can be extended to them. It was noted in §2.3 that, contrary to the usual claims found in the literature, result clauses are sometimes possible in contexts where the interpretation of *such* is not and cannot be (claimed to be) in terms of (high) degree, but it is rather a neutral, kind interpretation. Interestingly, such examples generally contain nouns like *situation*, *way*, *circumstance*. These are clearly non-gradable nouns. Consequently, a degree approach to result clause constructions will not be able to cover these cases. Under our approach, however, these nouns can be accounted for. They also illustrate, more clearly than gradable nouns, a mechanism that lies at the core of the interpretation of result clauses, which can be extended to the other cases, namely, that result clauses need to have scope over the entire situation. It will also become clearer that the consequence expressed by the result clause defines (instead of simply making more specific) the sub-type in question, and thus result clauses come to have a definitional role.

To begin with, consider the following examples:

(34) a. The numbers 1, 2, 3, 4, 5, 6, 7, 8, and 9 must be placed in the depicted triangle, in such a way that the sums of the numbers on each side are equal.[145]
b. Live in such a way that you would not be ashamed to sell your parrot to the town gossip.[146]
c. Read on to find out how to design your program in such a way that it keeps its memory usage in check... [147]

All these examples contain the noun *way* used with *such* and a result clause. *Way* itself is a rather general, or underspecified, term; its reference needs to be made more specific in context. In (34)a, for example, it is contextually restricted to 'ways of arranging numbers in a triangle'. The ways in which numbers can be arranged in a triangle can then naturally be classified by means of the possible operations on those numbers function of their distribution with respect to the sides of the triangle. One salient sub-type may then be identified by its having as a natural consequence the particular mathematical relations described, namely 'that the sums of the numbers on each side must be equal'.

Next, consider the following examples containing the noun *situation*:

(35) a. It's ridiculous that our footballers should be put in such a situation that there is a possibility of serious injuries.[148]

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[145] Adapted from: http://www.freewebs.com/mathareenaboppis/riddles.htm
[146] Source: Will Rogers, US humorist and showman (1879-1935) (at http://www.quotationspage.com)
[147] Source: http://delphi.about.com/od/windowsshellapi/ss/setprocessworkingsetsize-delphi-program-memory-optimize.htm
[148] Source: http://education.theage.com.au/cmspage.php?intid=135&intversion=31

b. …the act must be of such character and done in such a situation that the actor should reasonably have anticipated that some injury to another would probably result.[149]
c. If you find yourself in such a situation that you cannot keep your calm and know you will only continue to have difficulty with that patient, you need to ask your supervisor to change your assignment.[150]
d. The statute defining this offence imposes punishment on any person who wilfully or unlawfully causes or permits any child under the age of sixteen years to be placed in such a situation that the life or limb of the child is endangered…[151]

Situations are typically associated with consequences they may have. Consequences come to be a default criterion available for defining (and distinguishing among) possible sub-types of situations. Take (35)a, for instance. Again the actual content of the noun is specified by the context: here it is a situation in which footballers are placed. This is still not very specific. Sub-types of situations of the kind given by the main clause in (35)a can be identified in terms of e.g. how the footballers are affected by the circumstances in which they are placed. One such natural consequence is possible injury. This will identify the sub-type of situation in referred to by *such* in the main clause.

Finally, consider some examples containing the noun *circumstance*:

(36) a. If the information has been acquired in such circumstances that it would be a breach of confidence to disclose it to another, then courts of equity will restrain the recipient from communicating it to another.[152]
b. … the injury was received in the course of duties performed in such circumstances that it would be inequitable if an award were not payable in respect of the officer...[153]
c. … if the letter or document which contains the acceptance shows that it has been sent in such circumstances that if its transmission had been normal it would have been communicated in due time...[154]

Circumstance is very similar to *way*, though more general as a term. It too needs to have its reference made specific in context. In (36)a, for example, it is restricted to circumstances in which information has been acquired. Sub-types of circumstances

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149 Source: http://www.4lawschool.com/torts/williams.htm

150 Source: http://nursinglink.monster.com/topics/10247-every-nurse-should-always-be-polite-no-matter-what-the-situation/posts

151 Source: http://www.jud.ct.gov/ji/criminal/part6/6.11-1.htm

152 Source: *Trusts Law. Text and materials* – G. Moffat (at http://books.google.com/books)

Interestingly, if one looks at the larger context in which this sentence occurs, it becomes completely clear that it is indeed about identifying the circumstances and that the role of (the consequence expressed by) the result clause is to identify the sub-type at stake. Here is the extract:

(i) The true test is to determine in what circumstances the information has been acquired. If it has been acquired in such circumstances that it would be a breach of confidence to disclose it to another then courts of equity will restrain the recipient from communicating it to another

153 Source: http://www.homeoffice.gov.uk/about-us/home-office-circulars/circulars-2010/001-20101/

154 Source: http://www.jus.uio.no/lm/unidroit.ulf.convention.1964/doc.html

in which information is acquired can naturally be distinguished e.g. in terms of agreements concerning the conditions for obtaining information. One such natural sub-type can then be identified by the fact that it naturally entails that disclosing it to another would be a breach of confidence, which is the consequence expressed by the result clause.

In sum, all these nouns refer to abstract entities, namely situations or states of affairs. The noun *situation* designates this sort of entity explicitly; in a sense, it is a name-holder for an eventuality or situation. The nouns *way*, *manner* or *circumstance* are always connected to an event and are used as typical event modifiers (inside a PP). If manners can be modelled as kinds of events, as proposed e.g. by Landman and Morzycki (2003), then these expressions could be taken to refer to this sort of entities (i.e. kinds of events, or situations). In the more philosophically oriented literature there have in fact been suggestions that the expression *way* induces reference either to an instance (or trope) of an event or to kinds of events (Armstrong 1989, 1997, Moltmann 2003, 2004a). The compatibility of these nouns with internal *such* and result clauses is presumably due to the fact that they denote precisely the sorts of entities which can make available potential sub-types that are naturally defined and distinguished in terms of the consequences they have. As these nouns are general, abstract terms, their reference needs to be made more specific in context, and the whole situation or eventuality expressed by the main clause is taken into account in this process. These contextually restricted (composite) sub-kinds are associated with consequences that necessarily follow from operations naturally involving the elements that make them up (recall e.g. (34)a). These natural consequences can, in turn, be used not simply to specify, but in fact to define (distinct) sub-types. The result clause construction then becomes definition-like.[155] This justifies representing the contribution of the result clause by means of the "="-relation (cf. also fn. 143 above). The examples (34)a and (35)a discussed above can then be paraphrased as follows (omitting, in the first part, some of the information contributed by the main clause):

(37) a. … some (type of) way of arranging numbers in a triangle x^k = a (type of) way of arranging numbers in a triangle y^k, such that if the numbers are arranged in that way, the sums of the numbers on each side will be equal
b. some type of situation x^k in which footballers are placed = a type of situation y^k such that, if footballers are put in that type of situation, there will be a possibility of serious injury

In a certain sense, these nouns could be regarded as a sort of place-holders formally providing internal *such* with the right type of argument. The result clause is essential to identifying the actual sub-type. Without it the *such* DP would be too unspecified to be informative in any significant way. We conjecture that this can also explain why these nouns are harder to use with *such* in exclamatives. There the consequence is not explicitly mentioned, but is left implicit. As a result, the sub-type seems to remain (too) unspecified. If exclamatives involve the speaker's emotional

[155] Possibly indicative in this sense are also the types of discourse in which these occur most frequently: administrative, legal, technical, mathematical, religious.

attitude towards the salient sub-type picked by internal *such*, then this would be hard to express in relation to a highly abstract, unspecified sub-type. (see §3.5 for more on the exclamative use of internal *such* structures)

In triggering sub-types that are primarily defined (and distinguished) by their consequences, situations differ from regular individuals. Individuals can be divided into sub-kinds based on a variety of possible criteria, but these are always properties that individuals may exhibit. Individuals do not have consequences per se, hence consequences are not available to distinguish between different sub-kinds, and ordinary (individual-denoting) nouns are normally incompatible with result clauses, as illustrated again in (38)a. This difference in sub-types of situations being identified, even defined, by their consequences vs. individuals being identified and distinguished by properties that characterize them possibly correlates with a difference in the tendency to use result clauses vs. relative clauses (or other modifiers) to qualify situations and individuals respectively.[156]

(38) a. *He is such a person that I cannot trust him.
b. He is {such a/ the kind of} person that would make anyone trust him as soon as they meet him.

Interestingly, there are cases where the participation of a certain type of individual in a certain situation may have consequences. This can license the use of ordinary nouns like *person/people* with result clauses.

(39) a. I found myself surrounded by such circumstances and such people that I knew not whom to trust.[157]
b. The current president is surrounded by such people that we have lost faith in him.

Not knowing what to do in (39)a, and the loss of faith in the current president in (39)b are not consequences of the individuals in question simply being (some sub-type of) people. Rather it is the situation as a whole, that of being surrounded by people of a certain type, that entails that consequence. It is in virtue of being participants in a situation (hence, one of the parameters that make up the situation) that individuals may be related to consequences, which can then (indirectly) distinguish between different sub-kinds of individuals. The interpretation of these *such* DPs could then be understood as: 'a sub-type of N such that if the event contains instantiations of that sub-type as participants then [result clause]'. In (47b), for example, it is that sub-kind of people that, when/if a president is surrounded by them, will cause the public to lose faith in that president. It is in this way that the use

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[156] As noted in §2.3, the noun *kind* (or similar nouns, like *sort* etc.) may also be used in correlation with relative clauses, as illustrated in (i). The noun *kind* is then responsible for introducing the kind reading; note also that these are the usual (sub-)kinds, that can be obtained with any noun; they are not salient sub-types that need to be identified by natural consequences.

(i) a. He is the sort of person that I just cannot trust.
b. They were the kind of women who were not easily forgotten.

For an analysis of *kind* see Carlson (1977), Wilkinson (1995), Zamparelli (1998).

[157] Adapted from http://www.state.il.us/HPA/facsimiles.htm

of result clauses with ordinary nouns becomes possible, with the situation/ event playing an essential role.

Still, in (39) *such* modifies the ordinary, individual-denoting noun *people*, while normally it cannot be used with this type of nouns because they fail to make available potentially distinct inherent sub-types. In addition, if the result clause expresses a consequence of the whole situation as discussed above, then *such* seems to be located, in surface structure, at a lower level than the one at which the consequence-entailing entity is computed, i.e. the eventuality. Semantically, this can be defined by using a neo-Davidsonian notion of event in a broad sense (cf. e.g. de Swart 1991), and, in syntactic terms, it would roughly correspond to the vP, or even the whole proposition which contains the *such* DP (e.g. de Swart 1991 takes sets of eventualities to correspond to the denotation of a proposition). In order to be related to the eventuality, [*such* + result clause] would need to have scope over this larger constituent containing the DP. This means that *such* (or the whole DP) would need to raise and adjoin to the top node of this constituent. In the literature on degree phrases, which is the context in which result clauses have been investigated, it is in fact widely assumed that elements like *so*, *too* etc. are operators which undergo Quantifier Raising (QR) at LF (Rouveret 1978, Guéron and May 1984, Heim 2000, Meier 2003, Bhatt and Pancheva 2004 etc.). The result clause will also be located there, either following movement or by being generated in that position, depending on the approach one takes (for the former view, cf. Rouveret 1978, Guéron and May 1984, Meier 2003 etc.; and for the latter: Bhatt and Pacheva 2004)[158]. In addition, *such* + result clauses have been shown to be possibly attached higher than the CP containing the degree phrase: they can scope out of complement clauses of bridge verbs (cf. Rouveret 1978, Guéron and May 1984, Meier 2003 a.o.). For example, a sentence such as (40) is supposed to be ambiguous between two readings: one where the fact that Bertha is going to get the job is a result of her having claimed she has influential friends, and a second one where Bertha says that she is going to get the job because she has influential friends.[159]

(40) Bertha said that she has such influential friends that she is going to get the job.

The two readings are accounted for by assuming that *such* + result clause can move into two different scope positions: in one case it will be adjoined all the way to the matrix CP above the verb *said*, and in the other it will only move up to the level of the embedded CP, hence below the verb *said*. Such long movement seems not to be possible in non-bridge contexts[160]. (41), for example, is unambiguous and only has the narrow scope reading:

(41) Bertha whispered that she has such influential friends that she is going to get the job.

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[158] See Rijkhoek (1998) for a different type of account, namely in terms of conjunction.

[159] The example in is from Meier (2003) who adapts it from Rouveret (1978).

[160] Although result clauses seem to be able to violate (certain) island constraints as discussed in the extraposition analyses of result clauses (cf. Guéron and May 1984)

Meier (2003) concludes that LF-movement of *such* patterns with *wh*-LF movement and quantifier movement (though Rouveret 1978 discusses differences between the contexts that allow extraction of *wh*-elements vs. of *so*-result clause).

We will also assume that some raising mechanism is involved, whereby *such* can achieve the necessary scope. *Such* raises at least to vP level, and possibly higher, as suggested by the wider scope possibilities illustrated above. As for the result clause, we adopt the late-merge analysis proposed by Bhatt and Pancheva (2004); this seems to be supported by the facts discussed here since the result clause would seem not to be interpretable at a lower level, e.g. within the *such* DP. On such an account, the subordinate clause is merged late, by countercyclic merger, in the position where *such* has been QR-ed covertly; it can, therefore, end up at different heights in the tree, depending on the scopal position of *such*. The lowest position where [*such* + result clause] can be interpreted is vP, as it is at that level that a salient sub-type defined by a natural consequence that its participation in a situation can have may be constructed.

We have seen that (*such* +) result clause needs to have scope over the eventuality since consequences have to follow from situations. Therefore, a mechanism of raising *such* + result clause seems to be necessary. However, this mechanism is not sufficient. If raising could be enough to satisfy the requirements of *such* + result clause, then they would be expected to be possible whenever the right syntactic conditions for such movement are met. Therefore, they would be expected to be much more generally available than they are in fact (i.e. also in the ungrammatical examples above which, with the exception of the nominal content, are syntactically identical to the grammatical examples). This is where the particular semantic requirements we have proposed internal *such* + result clause place come in, namely the requirements in terms of the sub-type that can be selected (which makes the type of nominal used essential) and at which level of the structure. Therefore, it is at the latest at the level of the situation that a salient, inherent sub-type must be available, which can be defined by the consequence that follows from their participation in a situation.

Result clauses seem to be looser from but, at the same time, also more intrinsically tied to the matrix (DP) they are associated with. From a syntactic point of view, they are more independent (see e.g. discussion in Guéron and May 1984, Rijkhoek 1998 etc.). Unlike comparatives, *as*-clauses and relative clauses (at least on some accounts of the latter) which contain gaps corresponding to elements in the matrix CP so that e.g. the head noun participates in construing the denotation of the clause, result clauses contain no gaps to be related to elements in the matrix clause which would thus take part in the interpretation of the result clause itself. From a purely interpretive point of view, however, there is a tight logical connection between result clauses and their matrix: they express natural consequences, i.e. consequences which necessarily follow from the very nature of the individual as a participant in a given situation, and by that come to intrinsically define the sub-type of individual. *As*-clauses, on the other hand, may be used to identify sub-kinds by comparison, i.e. similarity, to other realizations of the kind. They supply restrictions by 'exemplification' of the same kind. Recall from §2.2 that Carlson (1977) takes the function of these clauses to be that of exemplifying the kind. A phrase like *such*

women as we saw yesterday (cf. example (22)a) is the set of properties associated with any object that is a realization of a kind (represented by the free variable x^k), which is *woman* in this particular example; in addition, the interpretation of x^k is further restricted by the presence of the *as*-clause: x^k can only be assigned a value from the domain of kinds such that it is not only some kind of woman, but also a kind of woman that we saw yesterday (for more details see Carlson 1977; for a different analysis see Landman 2006).

Note also that the mechanism illustrated above is restricted: simply being a participant in a situation is generally not enough to (automatically) license use of internal *such* + result clause with ordinary, individual-denoting nouns. In (42) below, just like in (28)a/(38)a above, the NPs do not have readily available, salient sub-types which could then be associated with consequences:

(42) a. *They {met/ talked to} such people that they didn't know what to do.
b. *The apartment had such windows that we bought it.

It seems then that, in the absence of a noun that can provide the right sort of salient sub-types, there are certain factors which may facilitate this use. One possible factor is the choice of the verb, which may give a hint as to what types to expect (also possibly related to the actual role the participant plays in the event) and thus would allow identifying a sub-type by means of a consequence related to the situation in which the individual is a participant – e.g. *being surrounded by* vs. *meeting* or *talking to*. Another may have to do with the type of statement at stake: generalizations seem to make this use more easily possible. One can come across (though quite rarely) examples of ordinary nouns with *such* accompanied by a result clause even in predicative position, i.e. in a context where not much is provided in terms of a situation in which the referent of the *such* DP would be a participant, and by that could have some bearing on the consequences of the state of affairs:

(43) a. There are such people that to think of a world without them is inconceivable.
b. Among you are such people that if they raise their hands and swear by God, He grants them whatever they want...

Such generic statements seem to facilitate a definitional use of the result clause. What the result clause expresses contributes in fact to delineating a sub-kind of individuals, and there is a sense that it is somehow related to, or follows from, some intrinsic quality of people.

More work is needed in order to make the conditions under which such uses are possible more precise. But we think the direction suggested here is promising. It offers a way to capture a class of cases which a degree analysis of *such* and result clauses would not be able to account for. What has also emerged is that the whole situation or event expressed by the main clause is relevant and needs to be taken into account. In addition, the compatibility of the nouns considered in this sub-section with result clauses is related to the definition-like use, and the fact that sub-types can be identified, even defined, by consequences ('natural' consequences).

3.4 Case III: stereotypical nouns

The third class of nouns that are compatible with internal *such* and result clauses consists of nouns that receive stereotypical interpretations. It will be shown that these are not gradable meanings and, therefore, they cannot be account for by a degree approach to *such* and result clauses. The analysis we have proposed can, however, be easily extended to cover these cases as well. Before showing how these nouns make available salient sub-types that can be related to natural consequences, let us first clarify what type of meaning is involved in these cases.

3.4.1 Background – stereotypical interpretations

Consider the examples in (44) and (45) below (partly repeated from (3) in section 1): they show that the use of *such* as an exclamative and with result clauses, respectively, is also available with nouns which receive stereotypical (often figurative) interpretations. These nouns were seen to fail other gradability tests, and, as such, raised questions concerning the viability of *such* as a gradability test, which was one of the facts that prompted the investigation carried out in this chapter.

(44) a. He is such a linguist! (he'd ask for grammaticality judgments even while the plane he's on is being hijacked!)
b. Johnny is such a boy!
c. Julie is such a boy!
d. Their new place is such a palace!
e. Those '50s Cadillacs were such boats! (you couldn't ride in them for a few minutes without getting sick!)

(45) a. But I'm such a linguist that I'd start subconsciously mimicking the sounds they'd make.
b. Johnny is such a boy that he can't even stand the sight of his sister's dolls!
c. Julie can't wear nylons or tights. She's such a boy that she rips and snags everything!
d. Their new place is such a palace that everyone is envious!
e. Those '50s Cadillacs were such boats that you couldn't ride in them for a few minutes without getting sick!

In all of these examples reference is made to properties stereotypically associated with a certain property or kind, namely the one normally denoted by the N modified by *such*: properties stereotypically associated with being a linguist, a boy, a palace, or a boat. This is what we call the stereotypical interpretation of nouns.

This interpretation is in fact also available elsewhere. The examples below are acceptable under a stereotypical, figurative interpretation of the non-modified predicate noun:

(46) a. Julie is a boy.

b. Their new place is a palace.

This is a type of interpretation that has been noted in the literature on bare nouns. It has been observed that in certain Romance and Germanic languages (though not in English), certain classes of nouns, usually those denoting professions or other functions or roles, can be used as bare predicate nominals, while other nouns (e.g. those denoting human sub-kinds, or other sorts of objects) need the indefinite article in the singular. This is illustrated below for Dutch[161]:

(47) a. Henriëtte is (een) manager.
Henriëtte is a manager
'Henriëtte is a manager.'
b. Henriëtte is *(een) vrouw.
Henriëtte is a woman
'Henriëtte is a woman.'

When the nouns that can be used as bare predicate nominals are used with the indefinite article, they may take on a different, figurative, interpretation. Thus, the version of (47)a with the bare noun is interpreted as 'Henriëtte is a manager by profession', while the version with the indefinite article attributes to Henriëtte properties stereotypically associated with being a manager, though she is not actually a manager professionally (cf. Beyssade and Dobrovie-Sorin 2005, de Swart, Zwarts and Winter 2007, Le Bruyn 2010 a.o.).

Thus, in these languages, for this class of nouns, the difference in interpretation, i.e. literal, profession vs. figurative, stereotypical interpretation, correlates with the absence vs. presence of the indefinite article in the predicative use of the nouns. For other nouns, and for all nouns in English, the different interpretations are not grammatically distinguished in this way. It seems that sometimes, however, a particular intonation and/or stress on the noun will be preferred, as it may facilitate the figurative, stereotypical interpretation, or disambiguate the interpretation, especially if there may be ambiguity, or with nouns which are less usually employed with this type of interpretations (or if this meaning is not lexicalized, as one might claim for cases like *clown* or *baby*, for instance – cf. also discussion in chapter 4).

All this shows that this interpretation is found independently of *such*. In other words, this is not a meaning that results from the application of *such* as a degree operator as the usual degree approach to *such* would have it – cf. Matushansky (2002b) who treats these as cases of scalarity coercion, or Bolinger (1972, 1980) who treats them as gradable (uses of) nouns. In fact, these are not gradable meanings. Consider (46) above. Julie and the place are said to have a (relatively large) number of properties stereotypically associated with boys and palaces, respectively. For example, in the case of 'stereotypical boys' these could be an observed preference for certain games or toys, negative attitude against others (e.g. toy-cars vs. dolls), lack of delicacy in behaviour or movements, lack of attention to detail in outfit, wearing pants vs. skirts, and so on and so forth. But on the basis of these properties it is not really possible to say to what degree Julie is a boy or to

[161] Example (47)a is from de Swart, Zwarts and Winter (2007).

what degree the place is a palace. The sort of ordering we know from gradable adjectives cannot be established on the domain of these nouns (on the stereotypical interpretation).[162] First of all, the number of properties necessary for an individual to qualify as a stereotypical-N may vary. For an individual to belong to the set, it must have one or more such stereotypical properties – usually it is a relatively large number, but in some cases one, very salient, property may be enough (e.g. climbing trees). Secondly, for those properties that are gradable, which is not necessarily the case, the degree to which they hold may vary. Moreover, the domain of these nouns is defined as a set of stereotypical properties that may be partly overlapping/ intersecting, i.e. not ordered among themselves e.g. by a part-whole relation, that would allow us to keep track of the relative positions of individuals in the domain either. Finally, the weight of the properties in deciding whether a given individual is, figuratively speaking, 'a boy' or 'a palace' may also vary (e.g. wearing pants might not be as important nowadays any longer). As a result, it is not clear how to establish an ordering on these domains.

Besides the fact that the stereotypical, figurative, interpretation described above can obtain independently of *such*, it should also be noted that such interpretations seem to be easier to obtain with some nouns (e.g. *clown*, *boy*, *palace*, *ballroom* etc.) than with others (e.g. *president*, *professor*, *building*, *room* etc.). This is presumably because certain objects or properties are not, or less, readily associated with stereotypical properties; most people would have no opinion about such objects or properties in terms of their stereotypical character. This is the case of titles such as *president*, *professor* etc., for example, which have rigid criteria for inclusion (hence: **He's such a professor of French Linguistics at Leiden University*.). An extreme case, where such stereotypical properties seem to be completely absent, is, for instance, that of general concepts like *person*, or concrete objects with very specific purposes like *chair*, *table, room* etc., which have few salient characteristics. As a consequence, such nouns will not readily give rise to the intended interpretation when used predicatively (i.e. (48) below can only have the literal interpretation), and will also not be grammatical with *such* as exclamatives or with result clauses:

(48) a. This (man) is a person.
b. This (object) is a table.

(49) a. *This man is such a person!
b. *This is such a table!

(50) a. *This man is such a person that I cannot trust him.
b. *This object is such a table that we have no use for it in the bathroom.

Or take *linguist*, for example (cf. (44)a and (45)a above): it would probably be easily used in this way only by someone belonging to or very familiar with the linguistics community, outside of which it is rather hard to have stereotypical images associated

[162] If one was to assume an ordering on the basis of typicality (in the sense of Sassoon 2007a, and as also suggested by the paraphrases used by Matushansky 2002b), then these nouns would not differ from e.g. *bird* or *boy* in their literal meaning, contrary to fact – see more discussion on this point in §3.4.2.

with being a linguist (which is not a profession as well-known or recognizable as that of lawyer or clown for instance). In addition, some concepts will naturally be associated with more, and others with fewer, stereotypical properties. Compare, for instance, *boy* and *boat* illustrated in (44)b,c,e and (45)b,c,e: for the former one can think up a plethora of such associated properties, as seen above, while for the latter the number is rather low (probably only size/ shape and a particular way of moving).

This also shows that it is stereotypes and not prototypes that play a role in these cases. Chairs may well have prototypes, and different objects may be evaluated with respect to their similarity to such prototypes (cf. Kamp and Partee 1995, Sassoon 2007a a.o.), but they still do not license the uses discussed here.

If stereotypicality is what is involved, the kind of variation described above is expected. As briefly pointed out in chapter 1, world knowledge plays a role, and may influence the availability of the relevant type of interpretations for different nouns. As discussed in a different connection by McCready and Ogata (2007), the availability of such interpretations depends on "the speaker's notion about how a particular property is normally, or at least how it should normally be, realized according to the speaker or his cultural context". Individual and cultural variation is to be found, expectedly, since the exact set of properties that an individual takes to be typical of a given class is not necessarily the same as what other people believe to be typical of that class.

Finally, recall another point made in chapter 1 in comparing examples (44)a,b and (45)a,b, where the individual is also an actual N, with the other examples in (44) and (45), where the subject DP is not an actual N and the sentence contains a predicate used figuratively that attributes stereotypical, non-essential properties of N to that individual. This shows that while a figurative use implies a stereotypical interpretation, the reverse does not hold: a stereotypical interpretation does not necessarily imply a figurative use. Nothing excludes that in the domain covered by the stereotypical interpretation of a noun N there will also be individuals that are actual Ns, as long as they exhibit the required type of properties too, i.e. stereotypical properties associated with the kind.

3.4.2 The interpretation of stereotypical nouns with internal *such* and result clauses

So far we have established what the stereotypical interpretation is, and that it is available independently of *such*. Now let us see how exactly this type of meaning interacts with internal *such* and result clauses so as to make their use possible, as in (44) and (45) above.

On the stereotypical interpretation, the N denotes a set of (individuals that have) properties which are stereotypically associated with being N. Gradable nouns were shown to be compatible with internal *such* because they easily prompt salient sub-types delineated by a high degree of the property included in their meaning, and these sub-types can be defined by natural consequences that they entail. In the case of stereotypical nouns, it is the different stereotypical properties contained in the meaning of these nouns (i.e. those properties that qualify individuals as stereotypical

Ns) that will be used to inherently define and differentiate sub-types in their domain, and thus make available salient sub-types that can be defined by consequences that they naturally entail. This will be the default criterion based on which, in the absence of any other explicit criteria, sub-types can naturally be distinguished within the respective kind. For example, in the case of 'stereotypical boys' there could be individuals who strongly prefer playing with toy-cars, or individuals who are not very delicate in behaviour or movements etc. These various stereotypical properties delineate possibly different sub-types of 'stereotypical boys'.[163]

Note that these natural sub-types are distinct or potentially distinguishable from one another but they are not (necessarily) disjoint. This is because, as discussed in §3.4.1, the domain of these nouns consists of clusters/ sets of possibly intersecting properties (or sets of individuals). If each of these potentially partly overlapping properties may delineate 'natural sub-types' that internal *such* picks out, then the respective sub-types will also be potentially partly overlapping. In this respect, these sub-types differ from the sub-kinds that are usually discussed in the literature on kinds, since there it is assumed that all sub-kinds of a kind must be disjoint (Carlson 1977 and much subsequent work): no object may belong to two different sub-kinds of the same kind.

The requirement to make potentially distinct salient sub-types available also explains the exclusion of core, definitional properties of N as possible criteria for defining sub-types that would be selected by internal *such*. These are properties which all individuals satisfying N must have (e.g. 'male up to the age of 14' for boy, or 'having feathers, being able to fly etc.' for *bird* etc.). Consequently, they will always fail to discriminate among sub-types of N. In addition, it is not just any (cognitively) salient sub-kind that will do, as already pointed out in §3.1; it must be one that is identifiable by a natural consequence. This is why internal *such* is not grammatical with 'ordinary' nouns on their basic, literal interpretation: they fail to make available inherently distinct salient sub-types that can be associated with natural consequences which internal *such* could single out within the domain of the N. This relates to the already noted lack of prototypical interpretations with internal *such*:

(51) a. *This robin is such a bird!
b. *This is such a {table/ chair}!

Reconsider in this context, examples (44)a,b and (45)a,b. In chapter 1 we already argued against assigning such examples a prototypical interpretation, as sometimes claimed in the literature (cf. Bolinger 1972, Matushansky 2002b) and pointed out that if one allowed for such an interpretation, it would be hard to explain why not just any noun that denotes (a set of) objects which come with prototypes or prototypical examples, but which lack stereotypical associations, (e.g. *bird* etc.), can be used with internal *such* (e.g. (51)). The apparent difference in interpretation

[163] This shows that such figurative interpretations are relevant to the compositional semantics – internal *such* would not be able to apply to the literal meaning of these nouns. This means that (at least certain types of) metaphor need to be computed in the grammar, at the sub-propositional level, as they participate in truth conditions and well-formedness conditions, and cannot be accounted for in a (neo-)gricean approach to metaphor.

between examples like (44)a,b and (45)a,b, on the one hand, and (44)c,d,e and (45)c,d,e, on the other hand, stems from an independent difference concerning the individuals they are predicated of. In the former, the individual referred to by the subject DP is already an actual N (i.e. has the core, definitional properties of N, such as the respective job in the case of *linguist*) and, in addition, *such an N* attributes this individual stereotypical, non-essential properties usually associated with being an N. This conspiracy of factors makes the respective individual look like the perfect exemplar of the category denoted by the N, leading to a prototypical-like interpretation. In the latter, the nouns are used figuratively; the individual denoted by the subject DP is not actually an N, and the sentence will only contain a predicate that attributes stereotypical, non-essential properties of N to that individual.

The salient sub-types in the domain of a stereotypical N can be associated with natural consequences, which, in turn, can be used to identify the sub-types in question. Consider for example the sentences in (45), some of which are repeated below for convenience:

(45) b. Johnny is such a boy that he can't even stand the sight of his sister's dolls!
c. Julie can't wear nylons or tights. She's such a boy that she rips and snags everything!
d. Their new place is such a palace that everyone is envious!

A building having stereotypical properties of a palace may naturally be associated with certain emotional reactions it generally gives rise to, such as admiration or envy etc. Similarly for (45)c, where one of the properties stereotypically associated with being a boy is clumsiness or carelessness with respect to outfit etc. Hence, one's being a stereotypical boy of this sub-type can have as a natural consequence ripping and snagging things. In sum, in all of the examples in (45), result clauses are possible due to the availability of a set of possible natural consequences corresponding to some natural sub-type of the kind of stereotypical-N individuals. This accounts for the difference in acceptability between examples like (45)b,c and an example like the following:

(52) *He's such a boy that he wakes up at 8 every morning.

Waking up at 8 cannot be a natural consequence of someone simply being a (sub-type of) boy; there is nothing inherent to being a boy that can determine one's waking up at 8. Given our world knowledge, waking up at 8 also cannot be naturally linked to any properties stereotypically associated with being a boy which it could a natural consequence of. Waking up at 8 every morning can, however, conceivably be a property that some, but not all, boys have. As such, it could in principle be used to distinguish between different types of boys. But in order for such a property, which is extraneous to the nature of being a boy (whether in the actual or stereotypical sense), to be possibly used to pick out a subset of the set denoted by the N, it must be added, and introduced into the structure at a level where it can intersect with the denotation of the NP, i.e. as a modifier – e.g. as a relative clause:

(53) He's (such) a boy that wakes up at 8 every morning.

Note that stereotypicality is also the source of the apparent (high) degree interpretation *such* DPs containing stereotypical nouns have been claimed to have. On the one hand, if the stereotypical properties happen to be gradable, then they are usually to a high degree as these will be most salient or make individuals stand out in the domain. On the other hand, stereotypical status is based on (conventionalized) generalizations about properties that are viewed as characteristically and prominently associated with a certain kind, so that they distinguish it from other kinds, even though they do not define the essence of the kind the way core, essential properties do. In addition, the use of *such* DPs is generally triggered by the presence in a context of particularly salient, discriminatory properties which, in the speaker's opinion, identify or justify identifying the individual in question as a sub-type of the respective kind,and this may come as an emotionally charged qualification, as possibly indicated by intonation – cf. discussion in §3.5. As noted in the discussion of gradable nouns too, the content of the result clause can also contextually influence the interpretation, and make it look like high degree. Take examples like (45)b,c,d where the result clauses themselves contain universal quantifiers or adverbs that give a sense of intensification (e.g. *everyone*, *everything*, *even* etc.). Such "extraordinary" consequences are likely to be interpreted as resulting from an "extraordinary" situation or property, which may be mistaken for a high degree interpretation. In sum, several factors may manipulate the interpretation in such a way as to make it at first sight describable in terms of (high) degree, while, in fact, degree plays no role here, and the meaning of the stereotypical N itself, on which *such* operates, is not gradable. The individuals in its domain, or the stereotypical properties for that matter, are not inherently ordered by possibly differing degrees of a property, as is the case with gradable expressions.

3.4.3 Stereotypicality and gradable nouns

Before going on to a discussion of some additional aspects of the interpretation of internal *such*, we would like to add a note concerning the relevance of stereotypicality for gradable nouns. Stereotypical properties can be associated with being an idiot, a genius, or a jazz-enthusiast. And even in the case of an abstract mass noun like *courage*, one could imagine stereotypical acts of courage, or stereotypical images associated with being courageous or with courageous people. This means that gradable nouns can also receive a stereotypical interpretation of the type just described. Consequently, when internal *such* is used with gradable nouns, two interpretations are in principle possible: *such* can pick out a salient sub-type inherently distinguished either by the high degree of the property intrinsic to the lexical meaning of the noun, or by some stereotypical property/ies that define the domain of the noun on the stereotypical interpretation.

One might object that there seems to be a difference between these cases and the ones discussed previously (i.e. the ones illustrated in (44)-(45)) in that when predicating an N like *idiot* etc. of an individual, one will not merely attribute to that

individual properties stereotypically associated with being an idiot. They will generally say that the individual is actually an idiot, in the sense of having the defining property of the category, idiocy. In other words, it seems that such nouns cannot be used purely figuratively. However, as already pointed out, a stereotypical interpretation does not necessarily imply a figurative use. In addition, there may be a difference in what comes to be considered to be stereotypical of e.g. *boys* or *boats* vs. *idiots*, or rather in the relation between stereotypical properties and the basic meaning of the nouns. In the case of boys, stereotypical images will refer to certain types of behaviour that boys (are generally thought to) display (such as playing with cars and disliking dolls etc.). Such images are based on generalizations of (observed) behaviour which individuals that belong to the kind *boy* happen to exhibit. But they may also be displayed by individuals that do not, by definition, belong to the actual kind boys. (Similarly for boats: any stereotypical properties one may think of are related to characteristics that the objects belonging to this kind normally display, such as a particular way of moving, or, possibly, a certain shape or size.) Such stereotypical properties are, then, in a sense, properties that are accidental to the kind they are associated with. In the case of *idiot*, or, similarly, *genius* or *jazz enthusiast*, however, any properties one may stereotypically associate with the kind are necessary consequences of being an idiot, i.e. of the property that in fact defines this kind (as a sub-kind of human beings). As such, they cannot exist independently of this property, in the sense that their presence necessarily implies (or evokes) the existence of the basic property (e.g. idiocy). Examples like *He's such an idiot* will be uttered when someone shows behaviour stereotypically associated with idiots; but it is not likely that this sentence may be used without implying anything about the person's intelligence (e.g. 'he's a type of idiot/ person that cannot tie his shoes properly' but still 'not actually characterized by idiocy').[164]

3.5 Speaker opinion and the exclamative use

3.5.1 Speaker opinion in the absence of overt result

So far we have been focusing on cases of internal *such* + result clause. However, as already noted at various points, the result clause need not be overtly present. The consequence may be left implicit. This is what happens in the exclamative use of internal *such* structures. It is to an examination of these uses that we turn in this section. We will show that the fact that the consequence which identifies the sub-type is absent and needs to be somehow recovered and added from the context of utterance results in an evidential flavour, whose linguistic relevance can be seen from the interaction of internal-*such* DPs with epistemic and/or evidential expressions that occur in the same sentence.

Sentences containing internal *such* DPs + result clauses can be embedded, reported, and are even compatible with inference. The examples below illustrate the last point, i.e. the possibility to embed them under the epistemic verb *seem* and the epistemic modal *may (very well)*.

[164] Nouns like *genius* etc. can be used ironically, of course, but that is still a different type of use.

(54) a. It seems he's such an idiot that he can't get any job done properly.
b. He may (very well) be such an idiot that we cannot hire him.

Internal *such* DPs used in the absence of an overt result clause interact differently with epistemic and/or evidential expressions that occur in the same sentence, as will be shown below.

Internal-*such* DPs without overt result clauses are best when used in direct assertions, where the speaker is the attitude/opinion-holder. But clauses containing *such* DPs may also be embedded under reporting verbs, under the factive verb *to know*, under attitude verbs, as well as under some verbs expressing certain mental processes like *to conclude*, as illustrated in (55). They are also compatible with perspective markers and with hearsay expressions used parenthetically, as illustrated in (56).[165]

(55) a. I've heard the new manager is such a jerk.
b. Everybody knows he's such a clown!
c. I think he's such a pedant!
d. I find he's such an idiot.

(56) a. In my opinion, he's such an idiot!
b. He's such an idiot, {(or so) they say/ I've heard/ I hear}.

The examples in (55)c,d with the attitude verbs *to think* and *to find* are equally acceptable, as both verbs are interpreted as introducing an opinion. However, when the verbs are used parenthetically, there is a contrast in acceptability:

(57) He's such an idiot, {I find/ ?I think}.

This is because *find* is simply interpreted as expressing an opinion (based on more or less direct experience of what is evaluated), while in the parenthetical use of *think* the inferential meaning of the verb is most prominent (i.e. 'probably, but not sure').[166] This contrast is sharper in Dutch, where the corresponding verbs *vinden* and *denken* are more clearly specialized and differentiated in meaning:[167,168]

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[165] For some speakers there is some clash in register between expressions like *in my opinion*, or *according to X*, and the sentence containing a *such* DP as they feel that the former are of a more formal register than the latter. Otherwise, the examples are completely acceptable.

Some speakers report that even examples like (55), where the *such* DP is part of a report (where the origo of the evaluation is not the speaker) or where an attitude or thinking verb like *to think* or *to find* is used (which have a weaker assertive force), are somewhat marked. This suggests that, for these speakers, *such* DPs very strongly convey a direct evaluation by the speaker.

[166] Note that contrastive focus on *I* makes the example more acceptable, presumably because it brings again to the fore the attitude meaning of the verb, and the sentence is interpreted as expressing the opinion of the speaker as contrasted with potentially different opinions.

[167] A similar contrast exists in French between the verbs *trouver* and *penser*.

[168] We use capital letters for *zo'n* in the Dutch examples to indicate stress, which excludes the possible 'you know what type/ one of those Ns'-reading (on which the examples improve significantly).

(58) Jan is ZO'N idioot, {vind ik/ ??denk ik}.
Jan is such.an idiot find I/ think I
'Jan is such an idiot, I find/ ?I think .'

Finally, when using a modal like *may (very well)*, an epistemic adverb (e.g. *probably*), the epistemic verb *seem* (especially when used parenthetically),[169] or the verb *suppose*,[170] the examples are clearly more degraded. Similar, even clearer, facts obtain in Dutch when the exclusively inferential modal expression consisting of the modal *zullen* 'shall' and the particle *wel*, is used, as illustrated in (60).[171] This contrasts with the facts illustrated in (54) above where the *such* DP is accompanied by an overt result clause.

(59) a. ?It seems that the new director is such a jerk.
b. ?He's such an idiot, it seems.
c. ??He may very well be such an idiot!
d. ??I suppose Mary's new boyfriend is such an idiot! (her boyfriends always are)

(60) *Jan zal wel ZO'N idioot zijn.
Jan shall PRT such.an idiot be
'Jan would be such an idiot.'

These facts suggest that for the exclamative use of internal-*such* DPs (in the absence of an overt result clause) to be felicitous, an agent has to be present as the source of the opinion conveyed by means of the qualification expressed by these DPs. This relation between the speaker-oriented, evidential meaning component and the exclamative use of these structures (which correlates with the lack of an overt result clause) may be understood as follows. Result clauses have been argued here to express natural consequences that identify, even define, the salient sub-type picked by *such*. They provide, therefore, the basis that justifies qualifying the individual in question as an instantiation of some (salient) sub-type of N. In the presence of the result clause, the description is complete and not linked to or dependent on the actual context of utterance. Consequently, the clause can be embedded, reported, or even compatible with inference to some extent. If the consequence is not explicitly expressed by means of a result clause, it is still implied, but needs to be recovered from the context and added to the interpretation, which results in the noted and context-dependence and evidential flavour. On the one hand, the lack of an explicit

[169] However, the judgments here are not as clear-cut as one might wish because *seem* is not exclusively inferential, but may also be interpreted as introducing a claim based on hearsay evidence. On this interpretation of *seem*, the examples become acceptable since, as already shown, *such* DPs are compatible with hearsay.

[170] Even when context is provided that makes reference to some sort of precedent for the expressed opinion.

[171] The examples in (59)-(60) would be fine if *such* was used anaphorically. (59)c, for instance, could be used as a reply to a question like the one in (i) below:
(i) Q: Could he be such an idiot that he forgot his own birthday?
A: Well, yes, he may very well be such an idiot.
This is, however, not the kind of use we are interested in here.

specification is responsible for the intuition that these internal-*such* DPs express the speaker's opinion, or some sort of direct, subjective evaluation. They tend to be used when there is a particularly salient property in the context of utterance which, in the speaker's opinion, qualifies (or justifies qualifying) the individual in question as a sub-type of the kind denoted by N. In other words, the interpretation is assigned with respect to the speaker's beliefs about certain properties which s/he takes as evidence qualifying an individual as instantiating a sub-type of N. On the other hand, this "suspension" of the specification makes exclamatives more dependent on, or connected to, the speech situation, as it is the context that supplies (or helps one recover) the properties that justify the qualification or identify a given individual as an instance of the sub-type picked by *such* in the speaker's opinion. Non-verbal elements such as facial expressions, tone of voice, gestures etc. also play a role in identifying the speaker's attitude and inferring what sub-type, defined by what consequence, s/he might have in mind. As already noted, the result clause may not always be omitted, as in the case of *situation*-type nouns. This is presumably because the sub-types supplied by these nouns are too abstract, unspecified without the consequence, which, as discussed in §3.4, defines them. On the one hand, this makes it harder for a speaker to have an attitude with respect to such sub-types (see also discussion in next sub-section); on the other hand, too much specific information would need to be recovered. We conjecture this is why these nouns are not very good in exclamative uses of internal *such*, where an overt result clause is not present .

To conclude, exclamative uses of internal *such* DPs, which lack an overt result clause, are more truly direct evaluations made by the speaker, which restricts their embedding possibilities, as well as their compatibility with expressions that mark the assertoric force of an utterance.[172] The best possible option is when the speaker is the origo (as shown by their compatibility with e.g. direct experience), but cases where there is a reported speaker are also acceptable. However, as soon as the claim is mediated by inference, the examples become degraded. In sum, these structures interact with evidentiality markers, and other expressions that bear on the status, i.e. force, of the assertion, in a way which suggests that they involve speaker (or rather: agent) opinion or beliefs that should be captured in a way akin to epistemicity- and/or evidentiality-related meanings.[173] We will not attempt to offer a formal account along these lines here, but suggest that it might be worth pursuing an account such as that put forth by Marandin (2008), who analyses [French] exclamatives, including those containing [the French counterpart of] *such*, in terms of direct evidentiality. The exclamative uses of internal *such* DPs without overt result clauses are also associated with a particular intonation. It is on this aspect that we will focus in the next sub-section.

[172] Exclamatives are in general subject to restrictions when it comes to being embedded; however, the restrictions that are usually discussed concern factivity (Grimshaw 1979, Zanuttini and Portner 2003, Castroviejo-Miró 2006 a.o.)

[173] Or in some other way that could capture/ incorporate agent beliefs (e.g. by indexation to the speaker).

3.5.2 Unexpectedness and prosodic realization

As mentioned in §2.1, it has been claimed in the literature that there is a difference in stress (stress contour) between the two *such*'s: "degree" (our 'internal') *such* always bears a pitch accent, while kind (external) *such* may, but need not (Carlson 1977, Landman 2006). This has been taken as yet another argument in favour of distinguishing between the two lexical items. However, the data we have collected seem to contradict this conclusion. More structured research is needed on this issue; experiments should be designed and carried out in order to find out whether the interpretation we have analysed as pertaining to internal *such* always correlates with a certain stress contour or prosodic pattern that is different from the one found with external *such*, or whether, in case internal *such* only sometimes bears a particular type of stress, this correlates with any additional difference in interpretation. Still, the data we have so far do seem to suggest a certain pattern, which is worth further investigating. In this sub-section we will present some preliminary observations in this respect, and suggest an account.

First of all, contrary to the claims generally made in the literature, our informants report no difference between examples containing internal *such* and those containing external *such*: like external *such*, internal *such* need not bear any particular stress/ pitch, though it may. In addition, the noun modified by internal *such* may also be stressed. It seems that this is the case especially (i) when dealing with stereotypical interpretations of nouns which are not very well-established and the intonation facilitates the desired interpretation,[174] or (ii) when *such* itself already bears stress (and this spreads over to the noun). Finally, the rising contour typically associated with exclamative utterances in general also affects the intonation of internal-*such* DPs contained within such sentences. As for the cases where *such* is stressed as compared to when it is not, speakers report this has an emphatic effect, or adds a sense of surprise.

We take this to indicate that *such* may be associated with an expression of unexpectedness, though this is not necessarily always present with internal *such* structures.[175] This may be analysed in terms of an (additional and optional) "unexpectedness" marker. In proposing this unexpectedness marker (henceforth UNEXP), we build on a parallel that can be drawn with *wh*-exclamatives and other expressions of surprise, unexpectedness, or markedness.[176] This view is inspired by Nouwen's (2005, 2011a) approach to adverbs like *surprisingly*, *unusually* etc. and

[174] Recall that a similar effect was noted in connection with the simple predicative use of stereotypical nouns.

[175] The question arises whether this can in fact be reduced to the meaning component previously discussed, i.e. speaker opinion. Marandin (2008), in fact, takes such an approach, trying to capture all these effects by postulating a direct evidential operator, while Castroviejo-Miró (2010) includes various shades of *emotion* in the operator she proposes to account for *wh*-exclamatives.

[176] Zanuttini and Portner (2003) argue that clauses with *so* and *such* are in fact declaratives, not true exclamatives (like *wh*-exclamatives, for instance). This is because (i) they may be embedded under non-factive predicates such as *think*, hence they fail the factivity test; (ii) when embedded under *amazing*, this predicate can be negated and questioned, which indicates that the sentence lacks the scalar implicature of exclamatives; and (iii) they may serve as answers. Based on different criteria, however, other authors claim that such clauses are, in fact, true exclamatives (cf. Elliott 1974, Michaelis and Lambrecht 1996, Nelson 1997).

Castroviejo-Miró's (2010) and Rett's (2008a,b) accounts of *wh*-exclamatives. These are constructions which "express some sort of markedness", i.e. that pick out elements that, "in some respect, stand out in their domain" (Nouwen 2005, 2011a).[177] In terms of its realization, UNEXP is similar to the operator proposed by Castroviejo-Miró (2010) for *wh*-exclamatives, in the sense that its PF realization is a particular intonation, not an actual morpheme. However, it is different from it in two other respects. First, we do not take it to operate at the propositional level (i.e. on propositions or sets thereof), but to attach to *such* and have its same scope (recall that, as discussed in §3.3, there are independent reasons for which *such* needs to raise, which results in a wider scope that just DP-level). Secondly, we do not define it as requiring by definition an ordered set (of propositions) to operate on, though it is compatible with one.[178] So let us see how UNEXP interacts with the interpretation of internal *such* DPs. As noted in §3.1, §3.3 and §3.5.1, *situation*-type nouns do not occur in exclamatives; therefore, we only have the other two types of nouns to address here, namely gradable nouns and stereotypical nouns.

As discussed in §3.2, when internal *such* co-occurs with gradable nouns, the salient type that it picks out is one delineated by a high degree of the property included in the meaning of the noun (and one that can be identified by a natural consequence, which is, however, in this use left implicit), e.g. the *big idiot*-type. What UNEXP adds is that it was not expected that *x* be an instantiation of that sub-type. If *x* is a big idiot and that is surprising, and given that if he turned out to be a bigger idiot he would still be included in the set of big idiots, then if he turned out to be a bigger idiot, that would still be surprising. Inferences to a high(er) degree thus stem from the inclusion relations that hold among such sets.

When co-occurring with stereotypical nouns, UNEXP + *such* will single out an unexpected stereotypical property which makes the individual in question stand out, or rather it will say that a given individual is an instantiation of a salient sub-type delineated by a stereotypical property that was not expected to hold of the individual (in a certain context). No inferential patterns (based on inclusion relations between sets) of the type we have encountered with gradable nouns occur here, given the different structure of the domains associated with these nouns and the way sub-types are made available. They simply consist of clusters of possibly intersecting sets of stereotypical properties, which are not ordered within or among themselves (cf. §3.4 for more discussion). Consider the following example repeated from above:

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[177] Note that the accounts referred to above analyse these as degree constructions. We only retain the unexpectedness/ markedness aspect and dissociate it from degree. We take the unexpectedness marker to attache to *such*, which is also not a degree operator in our account.

[178] Nouwen (2005, 2011a), followed by Castroviejo-Miró (2010), shows, within a degree-based account, that unexpectedness is a downward monotonic (or upward scalar) function, which reverses the entailment patterns normally associated with expressions that are upward monotonic (or downward scalar). So while with a gradable adjective like *tall*, being tall to a certain degree entails being tall to all lower degrees too, when an adverb like *unusually* or *surprisingly* is added, the inferences are reversed and become, instead, upwards directed: *John is amazingly tall* entails that, if John had been taller, he would still be amazingly tall. In our proposal, monotonicity results from the type of sub-kind that is selected. If certain entailment patterns hold and lead to certain types of interpretations, they seem to be present independently of the contribution of this operator. For example, the inferences related to the *big idiot*-type, which also show up in the cases with result clauses, that is, in the absence of unexpectedness (cf. discussion in §3.2). Conversely, as will be shown below, stereotypical nouns do not give rise to this type of inferences.

(61) Julie is such a boy!

This could be uttered if Julie displays some behaviour stereotypically associated with being a boy – e.g. if she is seen playing with cars or climbing trees while the other girls are playing with dolls, or if she is clumsy or careless about her outfit (recall e.g. (45)c) etc. – as long as the speaker wants to insist on the unexpected character of that behaviour. It is not necessary that it be unexpected for Julie to behave like a boy; it may be simply that she just did (yet) another thing stereotypically associated with boy-behaviour which was not expected. For (44)c to be felicitous, Julie need not outrank other individuals in terms of the degree to which she is a stereotypical-boy. Nothing like that is implied. All that it takes for such an example to be felicitous is for her to display a stereotypical-boy property that was not expected to hold of her.[179] If another individual were to display the same property in the same way, it would not automatically mean that they are stereotypical boys to the same degree. Therefore, what underlies the felicitous use of such examples is the (un)expectedness of a given individual to belong to a certain sub-kind, namely one delineated by the observed stereotypical property, rather than an established ordering of individuals in the domain of the stereotypical-N.[180]

Alternatively, it may be the case that, in a given context, an ordering may be imposed on stereotypical properties in relation to given individuals – an ordering with respect to (un)expectedness as to whether some properties would hold, or which properties would hold, of individuals in certain contexts. This intuition could be captured if the unexpectedness marker itself were to introduce a scale, namely an unexpectedness scale. UNEXP would then be parallel to e.g. *even*-elements, which, at least on some accounts (Giannakidou 2007), are taken to induce an ordering along a likelihood scale, and to associate with the highest or lowest element on that scale. On this account, *even*-elements induce an ordering of individuals on the domain of a predicate P according to a likelihood scale and the *even* phrase will pick out the least or most likely individual(s) from the given set of alternatives, e.g. *likelihood (P(x)) >/< likelihood (P(y))*. In a parallel way, UNEXP would force an ordering on the set of stereotypical properties relative to given individuals along an unexpectedness scale, i.e. according to the speaker's expectations.[181] But note that simply introducing an ordering along a scale of unexpectedness is not enough, so the operator will also

[179] Also irrespectively of whether or not other stereotypical properties [are known to] hold of that individual – hence, it cannot be the case either that individuals are (inherently) ordered by the number of stereotypical properties that hold of them (in contrast, such an interpretation may be arrived at with expressions like *more of an N* – see §5.3.).

[180] As discussed in §3.4.3, gradable nouns may also be associated with stereotypical interpretations. In that case, the interaction with UNEXP would be along the lines described in these paragraphs for stereotypical nouns.

[181] So, differently from *even*-elements, which induce an ordering along a scale of likelihood with respect to the predicate of the clause, our operator will order the individuals with respect to a salient property *P*. Two types of ordering seem possible in the case of stereotypical nouns:

(i) different individuals will be ordered with respect to the same stereotypical property --- that is, the speaker is surprised that *x* has property *P*, but may find it not, or less, surprising if *y* had that property:

Unexpectedness Scale: {… *P*(z), *P*(*y*), *P*(*x*)...}

(ii) different possible properties are ordered as applying to the same individual --- i.e. the speaker is surprised that *x* has property *P* but would not be surprised if x displayed property *Q*:

Unexpectedness Scale: {… *R*(*x*), *Q*(*x*), *P*(*x*)...}

have to be associated with the higher part of this scale. Consequently, the unexpectedness marker, just like *even*, would be a scalar item in the sense that it introduces a scale itself: it creates an ordering on an otherwise unordered set. But, importantly, this does not make it (or internal *such*, to which it attaches) a degree operator since it does not depend on an inherent ordering of the individuals in a set. In other words, it does not (need to) operate on gradable expressions.

3.6 Extension: [*such* A N] structures

In view of the proposal that *such* is not a degree operator, a question immediately arises. What does *such* modify when it occurs in DPs containing a gradable adjective (e.g. *such strange theories*): the whole NP or just the adjective? If the former view could be maintained, it would enable us to have a simpler and more uniform syntax and semantics for all cases. But this is not the view commonly taken. In this subsection, however, we will show that on the approach proposed here it becomes easy to analyse *such* as modifying the whole NP in a way parallel to the simple noun cases discussed in §3.2.

The dominant view (in the literature on degree) with respect to the use of *such* with NPs that contain adjectives, as in (62), is that *such* is a degree modifier of the adjective (Bresnan 1973, Matushansky 2002a,b, Meier 2003 etc.) but, for some reason, it needs to raise to the DP periphery, which obscures the syntactic relation between *such* and the adjective (cf. Bresnan 1973, and especially Matushansky 2002a a.o. for discussion of the movement involved).

(62) a. such$_d$ [*d*-strange] theories
b. such$_d$ a [*d*-strange] theory

The semantic relationship between *such* as a degree modifier and a gradable adjective can be easily captured – and it has been in the context of works on gradable adjectives and degree expressions that such proposals have been put forth. However, such an approach is not without problems. First of all, *such* is only used with NPs, it cannot modify an adjective appearing on its own, e.g. in predicative position, without a noun (but see Bresnan 1973, Matushansky 2002a for suggestions as to how to approach this problem).[182]

(63) a. such an intelligent man

[182] Both accounts rely on the stipulation of specific syntactic or spell-out rules that are basically meant to change *so* into *such*. Bresnan proposes a syntactic transformation, *Adj Shift*, to derive *such an A N* from *so A an N*: *so → such/__NP*; this is accompanied by a shift that triggers the particular word order that we find with *such*. Matushansky (2002a) proposes that degree expressions like *such*/ *so* need to raise to the DP-periphery for reasons that have to do with type mismatches. The difference between the two items lies in the absence vs. presence of pied-piping: if pied-piping takes place, the element will be spelled out as *so*, while if there is no pied-piping, it will be spelled out as *such*. Leaving aside a discussion of problematic issues that arise on an analysis such as proposed by Bresnan, we will just mention that such accounts do not generalize to the cases where the DP does not contain an adjective, unless one wants to assume the presence of covert adjectives in the structure. This also poses problems as will be shown shortly.

b. *such intelligent
c. so intelligent

Secondly, if *such* in *such an intelligent man* modifies the adjective, but it modifies the (gradable) noun in *such an idiot*, then we need to make a further distinction between two degree *such*'s, at least from a syntactic point of view: one that is an ad-adjectival modifier and another that is an adnominal modifier. The analysis can be unified by postulating some covert/ phonologically empty adjective in all cases where the so-called degree *such* co-occurs with a gradable noun: *such an ADJ idiot*. However, at least two problems arise on this view. First, stereotypical nouns are generally not compatible with adjectives on this interpretation, as illustrated in (64)a. Secondly, if covert adjectives were generally available, then why would they not be able to rescue internal-such DPs containing ordinary, non-gradable and non-stereotypical nouns, as illustrated in (64)b?

(64) a. #Their new place is (such) a {beautiful/ amazing} palace.
b. *He is such a __ person that I cannot trust him.

As will be discussed in section 5, such proposals have in fact been put forth, especially to account for *wh*-exclamatives and *quite*-structures (see Rett 2008b,c for a most recent proposal of this type); it will be shown that (similar) problems arise for those cases as well.

The alternative offered by the approach suggested here can avoid these problems by analysing *such* as modifying the NP, i.e. the [A N] combination as a whole. In fact, suggestions in this direction are found in e.g. Bolinger (1972), Landman (2006). These authors note that once we add a gradable adjective to a noun we obtain a gradable nominal; for them, "a gradable nominal is one that either contains a gradable adjective […] or a gradable noun" (Landman 2006). They do not, however, offer an explicit analysis, and, given most current assumptions about the syntax-semantics of NPs, adjectival modification and degree modifiers, it is not immediately obvious how to capture this intuition. In the standard, degree-based, approach to gradability, degree expressions operate on degree arguments, and gradable expressions (e.g. gradable adjectives) are those expressions that include just such a degree variable in their argument structure, i.e. they are of type $\langle d,\langle e,t\rangle\rangle$ (on the classical approach, but see chapter 1 for more discussion). The $\langle d\rangle$ argument must be bound first, before the adjective can combine with the noun, type $\langle e,t\rangle$. In the absence of an overt degree expression, this is generally assumed to be accomplished by a phonologically null degree operator *pos*. Consequently, once the adjective and the noun have combined, at the NP-level, there will be no $\langle d\rangle$ argument left. For *such* to be able to modify the whole NP as a degree modifier, the degree argument of the adjective modifying the noun would need to percolate up to the NP-level so that it can be targeted by *such*. What would be needed would be an operation that could "pass up" the degree argument of the adjective so that it would still be available at the NP-level for a potential degree operator to pick up. We do not see how this could be made to work unless one is ready to give up on compositionality. However, for an approach that does not treat internal *such* as a

degree modifier, but as a (special) case of a kind-referring expression (and which is, more generally, couched in a degree-less approach to gradability), degree arguments become irrelevant. Consequently, these difficulties do not arise.

This approach allows us to maintain a simpler, more uniform semantics and syntax for *such* NPs, since *such* will be doing the same job in *such an idiot* and *such an intelligent man*. Syntactically, it modifies an NP in both cases. Semantically, the (gradable) property contributed in syntax by the adjective plays the same role as the (gradable) property which is encoded in the lexical meaning of a gradable noun like *idiot*. Due to this added property, the 'complex' NP (A ∩ N) will prompt a salient sub-type delineated by a high degree of intelligence, which can be identified by a natural consequence (that can be expressed by a result clause – e.g. *He is such an intelligent man that every company wants to hire him*.).[183] In other words, the interpretation of *such an intelligent man* will be completely parallel to the cases where *such* combines with a gradable noun like *idiot* – see the discussion in §3.2.

Interestingly, in these 'complex' NPs, the salient differentiating criterion for making sub-types accessible to internal *such* is the one introduced by the expression which is the highest one in the syntactic structure. Otherwise *such* cannot 'reach' it. The effects that are found here are reminiscent of intervention effects. Consider the following example:

(65) such a friendly idiot

The NP in (65) contains both a gradable adjective (*friendly*) and a gradable noun (*idiot*). Therefore, there are in principle two criteria based on which sub-types could be made available. However, the only one that counts for the interpretation of *such* is the property contributed by the adjective. *Such* cannot target the gradable noun *idiot*, and simply pick out a salient sub-type of idiot. It looks like the noun is too deeply embedded to be reached by *such*. In other words, the adjective acts as an intervener in the path of *such* to the noun. It seems then that as soon as a modifier is added within the NP the (gradable) property it contributes will become the salient criterion. Once it is adjoined, it performs a division within the kind, and it determines the (new) relevant, salient dimension based on which sub-kinds can be further distinguished. It thus overrides the property inherent in the meaning of the noun, which would otherwise act as the default criterion for distinguishing salient sub-kinds.[184]

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[183] Note that we use the term 'complex' here rather informally, to simply refer to an NP which contains more than just the head noun, in the case at hand, the noun plus an adjective / modifier.

[184] This seems to be what generally happens. In the absence of overt modification, nouns like *idiot* and abstract mass nouns like *courage*, *beauty* etc. give rise to a default interpretation in terms of sub-kinds distinguished by the high degree of the property. But when an explicit modifier is present it will act as the criterion for delineating sub-kinds. This can also be seen by comparing (i)a and (i)b below:

(i) a. such beauty
b. (such) cold beauty

Conversely, if the modifier which is added does not have the right sort of meaning, that is, a meaning which could make salient sub-types identifiable by natural consequences available, it may block the use of a noun which would otherwise be compatible with internal such, which also suggests that the meaning of the noun itself is no longer directly accessible to such:

(ii) *It's such a mathematical problem!

Finally, this approach can also straightforwardly capture the fact that *such* is only used with NPs and cannot modify an adjective appearing on its own, an issue that was problematic for the classical (i.e. degree) approach. This follows naturally given the analysis of *such* as an ad-nominal modifier, with the particular semantics argued for above; it would in fact be unexpected if *such* could co-occur with adjectives alone.

An interesting case which supports the view proposed here is offered by the German equivalent of *such*, *solch*, which agrees with the modified noun, and is interpreted as modifying the whole NP in both of the following examples:

(66) a. ein [solcher Idiot]
a_{MASC} $such_{MASC}$ $idiot_{MASC}$
'such an idiot'
b. ein [solcher [guter Freund]]
a_{MASC} $such_{MASC}$ $good_{MASC}$ $friend_{MASC}$
'such a good friend'

In order to modify just the adjective, either the invariant version *solch* or *so* will be used, as illustrated below:

(67) a. ein [[solch guter] Freund]
a_{MASC} so $good_{MASC}$ $friend_{MASC}$
'such a good friend'
b. ein [[so guter] Freund]
a_{MASC} so $good_{MASC}$ $friend_{MASC}$
'such a good friend'

The contrast between (66)b and (67)a suggests that modification by *solcher* of the [A N] complex is a distinct option.

4 Concluding remarks

It has been argued in this chapter that what had been labelled "degree" *such* is not a degree operator. Our proposal is centred on the idea that all occurrences of *such* share a common semantic core which has to do with kind-reference, and the differences lie in what sort of sub-kinds can be accessed and how. Unlike external *such*, which can pick up an externally determined sub-type, by co-reference, internal *such* picks out salient sub-types that can be identified by natural consequences. For this, it has to rely, on the meaning of the noun itself in the context of the situation

This example is also interesting because the modifier that is used is a relational adjective, and these adjectives have been analysed as properties of kinds or as mapping kinds to sub-kinds (cf. Bosque and Picallo 1996, McNally and Boleda 2004 a.o.), so one might expect them to be compatible with internal such. Again, however, we see that the taxonomic sub-kinds they may provide are not the sort that internal such requires (see also the discussion in §3.1).

expressed in the clause in correlation with the content of the result clause (where one is overtly present, otherwise, recoverable from the context).

We have seen that only certain nouns can make available the needed sort of sub-types, and that gradable nouns such as *idiot*, *courage* etc. are only a subset of this class; the others include nouns such as *situation*, *way* etc., and nouns that receive stereotypical interpretations. In the first case, the nouns easily prompt salient sub-types delineated by a high degree to which the property contained in the meaning of the noun holds (e.g. "big idiots"). In the second case, the nouns provide sub-types of situations or events, which are naturally defined by their consequences. In the third case, the domain of the noun is defined by stereotypical properties which can naturally discriminate among possible sub-types of N (i.e. salient sub-types can be delineated by the various stereotypical properties that may hold of the individuals). It was also shown that consequences need to be "calculated" higher in the clause structure – e.g. at the vP-level (rather than just DP-internally).

In our account, the contribution of result clauses is an essential piece of the puzzle. We have argued that the possibility of using a result clause correlates with the possibility of forming a set of possible natural consequences of belonging to a certain kind, which correspond to and identify salient, inherent sub-types of that kind. For the cases where a result clause is not overtly present, as in the exclamative use, we have assumed that the consequence is still implied and inferable from the context. These uses have been seen to have specific properties in terms of their interpretation, their interaction with evidentiality and their prosody.

This proposal can better account for the distribution and interpretation of nouns with internal *such* than the analyses assuming it is a degree operator. Gradable nouns can be dealt with on either approach, but the approach we have proposed here also offers a straightforward way to analyse [A N] combinations in a completely parallel fashion, with no additional adjustments or stipulations.

The other two classes of nouns cannot be accounted for by a degree analysis of *such*. In §3.4 it was shown that the meaning of stereotypical nouns is not gradable, either inherently or due to some sort of coercion, and the interpretations that obtain are not in terms of degree.[185] When internal *such* is used, a salient sub-type is picked that may be delineated by any of the stereotypical properties that define the domain, as long as the sub-type can be associated with a natural consequence. No ranking is implied to hold between the individuals in the domain in terms of the degree to which a property holds of them. If an apparent high degree interpretation may be thought to be present, that stems either from stereotypicality itself – a reflex of the sort of properties stereotypical attributes are, or it is a contextual effect, arising from the content of the result clause, or may be due to an ordering that is imposed, contextually, when the additional unexpectedness operator is used, at least on one

[185] A degree analysis, especially if set within a degree-based approach to gradability, normally also comes with specific assumptions about the syntax of the respective expressions, such as the projection of a dedicated functional phrase, DegP, that would host the degree operator. In this chapter we have not discussed the syntactic implications of a degree analysis of *such* and the possible undesirable complications this might introduce into the system, as we started out by arguing that *such* is in fact not a degree operator and by proposing an alternative account. However, a discussion of these issues (i.e. the evidence for and the consequences of assuming a DegP for nouns) will be elaborated in the next chapter as well as in the concluding chapter of this dissertation.

possible account of it, but then it is an ordering along a superimposed scale of unexpectedness (cf. §3.5.2).

The clearest advantage of the approach proposed here emerges once one considers *situation*-nouns. These are the most problematic under a degree approach to *such* (and result clauses), since the interpretation has nothing to do with degree in these cases. On our analysis, where internal *such* in correlation with result clauses picks out sub-types defined by their possible natural consequences, as explained in §3.3, these cases now fall into a natural class and the otherwise puzzling parallels with e.g. gradable nouns are predicted by the analysis.

These cases are also relevant in showing that the distribution of result clauses is not dependent on an expression of degree, which is the generally assumed view in the literature (Meier 2003, Rijkhoek 1998 a.o.). Our account, which does not rely on degree relations, but instead associates natural consequences with salient sub-types they can identify, is therefore better suited to deal with these cases.

Further support for a more unified approach to *such*, which argues that all occurrences of *such* share a common semantic core having to do with kind-reference, comes from the existence of other expressions which make explicit reference to kinds and which, in certain contexts, can also get a reading which has been described in terms of degree, or intensification.[186] We refer here to expressions such as *kind of*[187], illustrated below:

(68) a. that kind of animal
a'. what kind of a guy
b. that kind of idiot
b'. that kind of an idiot

Bolinger (1972) discusses the difference in interpretation as the result of a semantic shift from identifier to intensifier which he claims expressions like *such, that/what kind of, some* have undergone. He claims that the 'suchness' of something is likely to be an intensifiable characteristic due to the closeness of identification by some noteworthy characteristic to intensification of that characteristic; then the act of pointing easily turns into an act of 'pointing up' (p. 91-92). The approach we have suggested can capture Bolinger's intuition. Note, first, that the examples involving what has been labelled a degree interpretation in fact do not involve (intensification of) an added characteristic; it is rather something within the meaning of the noun itself that is targeted: namely, a salient sub-type the noun inherently provides, precisely as proposed above for internal *such*. We find here, therefore, the same difference with respect to how sub-kinds are made available: either by external criteria, or inherently to the meaning of certain types of nouns. Therefore, adopting an approach such as the one we have suggested here allows the (otherwise accidental) parallel behaviour of various expressions to be captured in a uniform, systematic way.

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[186] Note that, interestingly, *that/what kind of* can be used to intensify a gradable property, as in (68)b, but also a quantity, as in (i) which contains mass nouns:
(i) I don't have that kind of money and I don't have that kind of time. (Bolinger 1972)

[187] For an analysis of *kind*, see Carlson (1977), Wilkinson (1995), Zamparelli (1998).

In sum, internal *such* is not a degree operator. A gradable meaning is not required, nor created. Consequently, co-occurrence with internal *such* (with result clauses, or in exclamatives) cannot be used as test for gradability. However, this does not exclude the possibility that some nouns may have a gradable structure. This seems to be implied, even if only indirectly, in the case of nouns like *idiot*, *courage* etc. which seem to make salient sub-types delineated by a high degree of the property encoded in their meaning, e.g. "big idiots". In the next chapter we will examine certain types of adjectival modification that seem to lead to a similar interpretation, in the sense that they seem to denote sets of individuals that have the property to a high degree – e.g. *a big idiot*, among others – and will show that the relevant interpretation is in fact arrived at without the manipulation of gradable structures. Before concluding this chapter, however, we need to (briefly) discuss, in the light of the proposal made here, other constructions which have been analysed as degree constructions, on a par with "degree" *such*, namely *wh*-exclamatives, *quite*-structures and predicative partitive structures (e.g. *more of an idiot*).

5 Related cases

In the preceding sections of this chapter we have shown that occurrence with the so-called "degree" *such*, our "internal *such*" is not determined by gradability, contrary to what is generally assumed in the literature. We have argued that internal *such* is not a degree operator, but a kind-referring expression, which places particular requirements, in terms of the sub-kinds that it can select. Gradable nouns are only a subset of the nouns that satisfy the requirements imposed by internal *such*, and a gradable meaning as such is neither required to be present nor created as a result of using *such*. In view of this conclusion, questions arise concerning the status of other structures which have been treated in the literature in a similar way to *such*, namely *wh*-exclamatives, *quite* and predicative partitive structures (e.g. *more of an idiot*). These have been generally analysed as degree constructions involving an interpretation and distribution quite similar to *such*. In this section, we will briefly re-examine these constructions; the question we will ask is whether they indeed involve operations on gradable structures and need to be analysed as degree constructions. We cannot offer an account of these constructions here but will only sketch an answer to this question.

We will suggest that *wh*-exclamatives do not provide a reliable basis for distinguishing (lexically) gradable from non-gradable nouns, and that *quite*-structures need not be analysed as degree constructions. In the case of predicative partitive structures, gradability seems to be involved, but it comes into play at a higher level, not at the lexical nominal level, and seems to make use of an ordering in terms of typicality (cf. Sassoon 2007a) which can be forced upon any noun when used as a singular indefinite predicate. In the concluding chapter of this dissertation we will discuss the more general implications this has for the representation of gradability in the nominal domain, also in the light of the conclusions that will be reached after the investigation of adjectival modification in the next chapter.

5.1 *Wh*-exclamatives

As discussed in chapter 1 (§2.1.1), *wh*-exclamatives have often been treated on a par with the so-called "degree" *such* and similarly used as a test for gradability (cf. Bolinger 1972, Matushansky 2002b a.o.). We cannot give a full overview of the literature here, and certainly cannot aim to offer a full account of the semantics of *wh*-exclamatives. The questions we would simply like to raise are whether nominal gradability is a necessary condition for the well-formedness of these constructions or whether they can indeed be used as a test for nominal gradability. We will suggest that the answer is negative.

First of all, let us briefly recall the basic facts concerning the distribution and interpretation of *wh*-exclamatives, as compared to what we have learned about *such*. Internal *such* (with result clauses or as an exclamative) has been shown to only be grammatical when it can pick out a salient sub-type identifiable by a natural consequence; the only nouns that can make such sub-types available are gradable nouns, stereotypical nouns and *situation*-type nouns, and to be even more restricted in the exclamative use, without an overt result clause. By contrast, *wh*-exclamatives can accommodate any noun. What has been claimed to distinguish between gradable and non-gradable nouns, and thus to be a diagnostic for gradability, is the interpretation (Bolinger 1972, Matushansky 2002b etc.): external or internal degree (cf. chapter 1, §2.1.1). Consider the following examples:

(69) a. What a guy!
b. What a doctor he has become!

These *wh*-exclamatives containing ordinary, non-gradable Ns receive an external degree interpretation: they identify someone as a particular type of individual (e.g. *a guy*), characterized by some property, external to the fact of being an N. It is this quality, left implicit, but inferable contextually, that is somehow remarkable, or unexpected, and triggers the use of the exclamative. The intonation may give a cue as to whether the evaluation conveyed is positive or negative in a particular context. So (69)a may be understood as 'what a *great/ awful* guy', and (69)b as 'what an *excellent/ awful* doctor'.

Now compare this to the following examples, which contain gradable nouns:

(70) a. What an idiot they hired!
b. What a genius he was!

These *wh*-exclamatives are generally claimed to be about the unexpectedly high degree to which the property included in the lexical meaning of the noun holds of the referent, i.e. they receive an internal degree interpretation. This may also be associated with a negative or positive attitude of the speaker, but, differently from the cases in (69), with the nouns in (70) the orientation is directly determined by the lexical meaning of the noun (negative in the case of *idiocy* vs. positive in the case of

geniality).[188] Such examples can also receive an external interpretation like that of (69), in the sense that the exclamation may be about some external property of the idiot, e.g. his/her being unexpectedly friendly, nasty etc. (cf. Bolinger 1972) .

Finally, *wh*-exclamatives can also combine with stereotypical nouns like *palace*, *boy*, *boat* etc., as illustrated in (71), where the given individuals stand out in terms of showing properties stereotypically associated with being a palace, or a clown. Therefore, it is with respect to properties included in the meaning of the noun that the individuals are evaluated, and in this respect the interpretation is similar to the internal interpretation of (70).

(71) a. What a palace their new house is!
b. What a clown their little boy is!

On the one hand, one may wonder whether all these data can be accounted for under one analysis, given the two apparently different interpretations (i.e. external and internal), which, incidentally, make *wh*-exclamatives look in some sense like they collapse the properties that would correspond to external and internal *such*. On the other hand, one would like to know why gradable nouns and stereotypical nouns behave in a parallel way in these contexts, given that we have argued before that the latter do not have a gradable meaning. Does gradability play a role at all in any of these cases?

The assumption generally made in the literature seems to be that it does. *Wh*-exclamatives have been analysed either as explicitly involving degree modification (Matushansky 2002b, Castroviejo-Miró 2006, Rett 2008b,c, 2011), or, if they have been analysed as operators of a different sort, they are still defined as requiring the presence of an ordering to operate on (Castroviejo-Miró 2010, but also Zanuttini and Portner 2003 who build an ordering on the domain into their mechanism of domain widening). All these accounts, therefore, assume gradability (or the presence of ordered sets) in some sense or another. Assuming that the nouns in (70) have this sort of meaning, as seems intuitively to be the case (see also discussion in §3.2), then all these accounts could in principle easily cover these cases. Something additional would need to be said about the cases in (69) and (71), i.e. about arbitrary non-gradable nouns which give rise to an external degree interpretation and stereotypical nouns, which have been argued to be non-gradable (cf. §3.4 and §3.5). There are two ways of approaching cases of non-gradable expressions that appear in the context of a degree operator or of an operator that requires the presence of an ordering: either assuming that the meaning of the non-gradable expression is coerced so as to make it compatible with the operator, or assuming the presence of a covert element that provides the required ordering. In what follows we will briefly (and in a rather simplified form) show how these types of accounts (could) deal with the different sets of data and what problems arise.

The first path is chosen by Matushansky (2002b), who analyses *wh*-exclamatives as degree operators which, in the absence of an adjective, semantically modify the noun. This can easily account for the simple gradable cases in (70), while all the other cases have to be treated in terms of scalarity coercion. Matushansky in fact

[188] Though ironical uses are, of course, possible, thereby reversing the sense of the evaluation.

proposes that the 'excellent' interpretation noted for examples like (69)b above is the result of "an attempt to apply a degree operator to a [non-gradable] noun". However, it is hard to maintain that the interpretation that the nouns *guy* and *doctor* get in examples like (69) is a coerced gradable meaning, or in any way different from their basic meaning. As for the nouns in (71), it was already argued in §3.4 that they do not involve gradable meanings, either inherently or as the result of coercion. An analysis in terms of (generalized) scalarity coercion is, therefore, confronted with problems.[189]

The other way of approaching data like (69) has been to assume the covert presence of a contextually given gradable property P which is said to hold to an unexpectedly high degree (most recently: Rett 2008b,c, but see also Milner 1978, Gutiérrez-Rexach 1996, Villalba 2003, Castroviejo-Miró 2006, 2010). The resulting structure for the examples in (69) is given in (72), where ADJ could stand for *great*, *exotic*, *crazy*, *awful*, *excellent* etc.[190] This seems to correctly capture the interpretation.

(72) a. What an ADJ guy he is.
b. What an ADJ doctor he has become!

Once a covert evaluative gradable adjective is assumed to be present in the structure, the *wh*-element can be easily analysed as a degree operator which semantically modifies this adjective.[191] Alternatively, it may be analysed as an operator which operates in some other way on the ordering provided by this covert adjective – cf. Castroviejo-Miró (2010), who proposes that *wh*-exclamatives involve an expressive speech act operator, which expresses the speaker's surprise, or emotion more generally, and is defined as necessarily taking an ordered set of propositions as its argument (which is the denotation of the *wh*-clause). The fact that the speaker is surprised at the high degree, not just any degree, is accounted for through the monotonicity properties of this operator.

This type of account could in fact be extended to examples with gradable nouns, like (70). It could be assumed that such examples also involve the presence of a covert adjective, for example *big* (cf. *What a big idiot!*); this is indicated in (73):

(73) a. What an ADJ idiot!
b. What an ADJ genius he was!

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[189] This raises a possible theory-internal problem: if the *wh*-exclamatives involve a degree operator which can so easily trigger scalarity coercion thus making the combination with any noun possible, then why would this coercion not always be possible with all other items that have been argued to be degree operators on such approaches, e.g. *such*?

[190] The surface syntactic position which the *wh*-element occupies on top of the indefinite DP containing the covert adjective, is derived through movement, just like in the cases where an overt adjective occurs in the structure – see Matushansky 2002a,b a.o. for discussion of movement in degree constructions.

[191] Rett's (2008b,c) analysis involves an illocutionary operator which takes as its argument a degree property *D* (type $\langle d,\langle s,t\rangle\rangle$) (which is how she analyses the content of the *wh*-exclamative), whose degree and world arguments it binds, and returns a proposition $\lambda w.\mathrm{D}(d)(w)$ with respect to which the speaker can express his/her surprise. The utterance of an exclamative is expressively correct if its content is a degree property *D* which is salient in the discourse, the speaker is surprised that a specific degree holds of that degree property, and that degree exceeds a contextually provided standard *s*.

This type of analysis, which postulates covert adjectives in the structure, faces problems, however, once one considers the nouns with stereotypical interpretations given that such noun interpretations are not available in the context of overt evaluative adjectives (even evaluative, speaker-oriented ones like *amazing* or *surprising*), as illustrated in (74)a, which is unacceptable on the intended reading.[192] So the fact that nouns with stereotypical interpretations are perfectly acceptable in *wh*-exclamatives, as illustrated in (74), remains unaccounted.

(74) a. #Their new house is an {amazing/ beautiful/ luxurious/ big} palace.
b. #What an ADJ palace their new house is!

What the surprise in examples like (71)a, on the stereotypical interpretation of the noun, is related to is a stereotypical property associated with palaces that holds of the place, not just any property that the place (which is just incidentally said to be a 'stereotypical palace') happens to have. It may be that it is very spacious, or very luxurious, that it has particularly fancy, expensive curtains or floors or bathroom appliances a.s.o; but it cannot be that it is painted red, or that there is a fir-tree growing outside the gate. So what seems to happen in the case of stereotypical nouns is that one of the stereotypical properties associated with palaces can be singled out and "extracted" out of the set denoted by the N. Therefore, rather than assuming the presence of an actual empty adjective with these nouns, it might be more appropriate to simply define the interpretation of *wh*-exclamatives relative to some contextually salient property (cf. Schwager's 2009 proposal for *amazing*-type adjectives). In the case of stereotypical nouns, the nouns provide the relevant *P* themselves.

We therefore obtain the following picture. *Wh*-exclamatives involve an operator that needs to apply to a gradable property. This gradable property can be a contextually salient property, which may either correspond to a property that is part of the denotation of the noun itself, as with stereotypical nouns, or be a completely external, contextually salient property, as with arbitrary, non-gradable nouns. There are also differences among non-gradable nouns, in the sense that some have salient aspects that are more prone to evaluation. For example, with professions nouns, like (69)b, the most salient interpretation is in terms of the quality with which one performs the respective job. We have seen that this strategy is also available to what we might want to call gradable nouns, where the gradable property that the operator applies to could correspond to an adjective like *big*. Given that the same mechanism (whereby a gradable property can be so easily filled in contextually) derives all cases, *wh*-exclamatives do not provide a basis for distinguishing between gradable and non-gradable nouns. The existence of this strategy also distinguishes *wh*-exclamatives from structures with internal *such*. *Such* can only pick out salient subtypes which are identified by natural consequences and which are delineated based on the meaning of the noun itself in the context of the situation expressed by the clause, in correlation with the content of the result clause; a property cannot simply

[192] With respect to the availability of modification by [possibly covert] adjectives, therefore, gradable nouns and non-gradable nouns pattern together, to the exclusion of stereotypical nouns.

be picked from the context and used in order to license the use of internal *such* with just any noun.

5.2 *Quite*

In this section we turn to the distribution and interpretation of structures containing *quite*. Although *quite* has been assumed to be very similar to internal *such* (cf. Matushansky 2002b a.o.), there are in fact significant differences between the two which indicate that a different account is needed. This also means that ruling out a degree analysis of internal *such* does not automatically entail adopting the same for *quite*. Therefore, we would like to know whether gradability is independently proved to be relevant for the distribution and interpretation of *quite*. We will suggest that it is not, and that *quite*-structures need not be analysed as degree constructions.

Let us start by briefly reviewing the distribution and interpretation of *quite*. As discussed in chapter 1 (§2.1.3), *quite* can modify both gradable and non-gradable nouns; but its interpretation has been argued to differ with the two types of nouns. When *quite* modifies a gradable noun, as in (75), it has been argued to indicate that the property denoted by the noun holds to a high degree (cf. Bolinger 1972, Matushansky 2002b, Birner and Kaplan 2004).[193]

(75) a. Adam is quite a genius.
b. John is quite a fool.

When it modifies non-gradable nouns, as in (76), the interpretation has been argued to be different (cf. Matushansky 2002b, Birner and Kaplan 2004). In chapter 1, we concluded that in such examples the interpretation is in terms of the respective individual being 'a remarkable/ impressive N', or rather 'remarkable/ impressive as an N': the individuals in question stand out in their domain due to some remarkable features they have as doctors, linguists, shirts or cars.[194]

(76) a. William is quite a doctor – last time he performed a surgery, he operated on four patients at once!
b. Martin is quite a linguist.
c. That's quite a shirt.
d. That's quite a car!

Finally, it it should be noted that stereotypical, figurative nouns seem to be less acceptable with *quite* than with internal *such* or in *wh*-exclamatives. For example

[193] However the particular intonation and context may influence the exact interpretation of *quite*. Thus, in examples like (i), it may be interpreted, depending on intonation, either as indicating high degree or low degree (i.e. attenuating the intensity of a gradable property).
(i) He is quite {an idiot/ a genius}.
And an example like (ii) [see (76)d in the main text] may be used to convey either a positive or a negative attitude of the speaker:
(ii) That's quite a car you've got there.

[194] Example (76)a is from Matushansky (2002b) and (76)c from Birner and Kaplan (2004).

(76)b above cannot generally mean that Martin shows a lot of properties (stereo)typically associated with linguists. So continuing the sentence by "all he can talk about is critical acquisition periods and universal grammar" would be infelicitous, while a continuation like "he's published in LI, NLLT, *and* Science!" would be felicitous. However, this sort of interpretation is not completely excluded either, not for all speakers, and not for all examples. This is shown by the variable judgments associated with the following examples:[195]

(77) a. ?(?)Julie is quite a boy.
b. ?That old Cadillac my grandpa owned was quite a boat!
c. (?)Their new place is quite a palace.
d. The company is in the process of developing a lavish new headquarters building in New York City… That's quite a palace for a company whose shares are down 40-some percent in the last year, and whose assets are deployed mostly in declining businesses…[196]

In sum, *quite* can modify both gradable and non-gradable nouns – the range of distribution is different from internal *such*, as well as from *wh*-exclamatives. Similarly to *wh*-exclamatives, the interpretation has been claimed to be different depending on the type of noun (cf. Bolinger 1972, Matushansky 2002b). So the question arises whether *quite* can be analysed in the same way in all cases and whether gradability should play a significant role.

Quite is generally assumed to be a moderately high degree modifier (cf. Bolinger 1972, Matushansky 2002b, Birner and Kaplan 2004). On the assumption that the nouns in (75) are gradable, such an analysis can apply to these examples straightforwardly: *quite* can be interpreted with respect to the scale identified in the meaning of gradable nouns. This could be implemented either in a degree-based approach or a degree-less approach to gradability (cf. chapter 1, §1.1, for discussion). On the former type of approach, gradable nouns would be defined in terms of degrees, e.g. as of type $\langle d,\langle e,t\rangle\rangle$ and *quite* could be defined as a degree operator (type $\langle\langle d,\langle e,t\rangle\rangle\langle e,t\rangle\rangle$) that boosts the standard somewhat. This seems to be the type of analysis that Matushansky (2002b) envisages, though she does not spell it out.[197] On a degree-less approach, gradable nouns would be defined as vague predicates and *quite* would be analysed as a degree function, which operates on the ordering introduced by the noun; when applied to N it results in a subset of the individuals in the domain.[198] When modifying non-gradable nouns, as in (76), *quite*

[195] Recall that in §3.3.4. we noted the variation in the availability of stereotypical interpretations in general, also in simple, non-modified predicate position. Therefore, such variation does not come as a surprise in itself; however, it is interesting to note the differences that arise in this respect between *such* and *quite*.

[196] Source: http://www.americanthinker.com/2006/04/pinch_gets_punched.html

[197] This is a possibility considered by finally rejected by Nouwen (2011b); the possible lexical entry for *quite* on such an analysis is given in (i):

(i) $[[quite]] = \lambda P_{\langle d,\langle e,t\rangle\rangle}.\lambda x.\exists d[P(x,d)\ \&\ d>>s]$
where $d>>s$ expresses that the degree exceeds the standard to some considerable degree

[198] Note that Klein (1980), who analyses degree modifiers of adjectives as degree functions that have the role of determining how the domain is to be partitioned, proposes that *quite* in fact moves the partition 'downward' as as to absorb the extension gap of the adjective. He takes *x is tall* to entail *x is quite tall*, and

has been taken either to coerce the meaning of the noun itself into a gradable meaning that can be degree-modified (Matushansky 2002b) or to be interpreted with respect to an external, contextually salient scale (Birner and Kaplan 2004, Rett 2008b,c). In what follows, we will consider each of these views and show their problematic aspects.

The first type of approach is suggested by Matushansky (2002b). Referring to examples like those in (76), which contain non-gradable nouns, Matushansky proposes that *quite* is interpreted "as if there is a covert adjective" similar in meaning to *excellent*, *outstanding* or *nontypical*. Subsequently, however, she suggests that this sort of interpretation is due to "an attempt to apply a degree operator to a [non-gradable expression]", just as she argues for *such* and *wh*-exclamatives. If *quite* is analysed as an adnominal degree operator, then all the cases of basically non-gradable nouns will have to be analysed as involving scalarity coercion. As also pointed out in relation to *wh*-exclamatives, such a view is hard to maintain in connection with examples like (76), where the nouns retain their basic, literal meaning, as well as for the examples in (77) (to the extent to which they are acceptable) which contain stereotypical interpretations of nouns which have already been argued in §3.4 not to be gradable, either inherently or as the result of coercion.

In addition, a theory-internal problem seems to arise on this account. While she analyses all these items (i.e. *quite*, *such*, *wh*-exclamatives) similarly, she describes the interpretation differently. For *quite*, the interpretation is paraphrased in terms of non-typicality, while structures with *such* are argued to be interpreted as 'a typical N'. This difference between *such* and *quite* (typical vs. non-typical), and the interpretation assigned to *quite* in particular, is rather unexpected within Matushansky's account. She analyses both *such* and *quite* as degree operators that indicate a high value on a scale and treats the examples where they co-occur with non-gradable nouns as cases of scalarity coercion, which brings about a meaning shift that corresponds to "having many of the typical properties associated with" being N (or A), and she claims that the notion of a prototype or a stereotype comes into play. Therefore, the fact that *quite an N* would end up being interpreted as 'a non-typical N' is rather contrary to expectations.

If, however, we accept that the interpretation of *quite*-structures is in terms of the referent standing out among Ns, as we suggest, then the 'non-typical' interpretation may just arise as a side effect: if something is somehow remarkable and stands out in its domain, then it is not just another N, and it is non-typical, rather than typical.

The second type of approach mentioned above is put forth by Birner and Kaplan (2004). Birner and Kaplan propose that, in combination with non-gradable nouns, quite is interpreted with respect to an external, contextually salient scale. For instance, quite a shirt might be one that is particularly ornate, expensive, tacky, old etc. This understanding of the interpretation of quite is also reflected in Rett's (2008b,c) proposal that, similarly to wh-exclamatives, quite structures like (78) possibly involve the presence of a covert gradable predicate P which receives its value from context (e.g. good, large, crazy, etc.):[199]

not the other way round.

[199] In order to derive the surface word order, raising of *quite* to the left periphery of the DP is assumed – see e.g. Matushansky 2002a,b a.o. This is supported by the fact that in structures where the DP contains an overt adjective, *quite* may occupy a position below the indefinite article. Thus, next to the structure in

(78) That's quite an ADJ turkey you have there!

This type of approach was already discussed in the preceding section in relation to *wh*-exclamatives, and the same comments apply here: the corresponding overt modification structures with stereotypical nouns are not acceptable on the intended interpretation. And although such nouns do not always easily occur with *quite*, they are also not completely excluded. An analysis postulating actual covert adjectives in the structure fails to capture these cases.

Such an account might be rescued in the way suggested in the preceding section for *wh*-exclamatives. This would mean that, just like *wh*-exclamatives, *quite* would not provide a basis for identifying nominal gradability in any reliable way. However, adopting this sort of analysis for *quite* does not seem appropriate. One reason is that the choice of contextual property is not completely free, unlike what Rett's and Birner and Kaplan's account would predict, and unlike *wh*-exclamatives. Take, for instance, nouns denoting professions (cf. (76)a-b above); such examples are interpreted in relation to the professional quality. In fact, a sentence like (76)b would not be felicitous if Martin were remarkable in some respect totally unrelated to being a linguist, for example if he were a very eccentric person (i.e. 'a linguist and an eccentric person').[200] (see also Nouwen 2011b for more arguments that the account based on the free insertion of gradable properties over-generates)

This also confirms our suggestion that *quite*-structures involve an interpretation in terms of the referent 'being remarkable as an N' (cf. also Nouwen 2011b for a similar suggestion, namely that *quite* contributes an interpretation in terms of [reasonable] noteworthiness). We would now like to suggest that *quite*-structures always involve this interpretation. In what follows we will sketch this view of *quite*, which seems better cover the data than the degree accounts discussed above.

It is important to recognize that if something or someone is remarkable, they are so for a reason; an individual will stand out in its domain due to something they have done or to some property they manifest. This is what will provide a basis for passing a "remarkability" judgment. It is also important to point out that we assume that such properties do not enter the composition (e.g. in the shape of covert adjectives as in the account of *wh*-exclamatives discussed in the preceding sub-section, or in Rett's and Birner's accounts of *quite*), but they simply provide the justification for the qualification. Given that the remarkability expressed by *quite*-

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(ia), the structure in (ib) is also possible:

(i) a. quite an unusual person
b. a quite unusual person

It should be noted, however, that these structures are not completely interchangeable (the examples below are from Bolinger 1972 and L. McNally p.c.):

(ii) a. quite an odd man/ quite a long time
b. *a quite odd man/ ??a quite long time

It is not completely clear to us at this point what underlies these differences, but it seems to suggest at least that not all *quite an (A) N* structures can be reduced to a corresponding *a quite A N* structure in which *quite* would be a modifier of the adjective (but see also Bolinger 1972 for the suggestion that phonological factors might play a role in the acceptability of these structures).

[200] Moreover, if *such*, *wh*-exclamatives and *quite* are similarly analysed as degree modifiers/ operators, as generally done in these accounts, then it is also hard to explain the differences in distribution among them (which may be interpreted as differences in their ability to (i) license covert adjectives, or (ii) to coerce the meaning of the noun, depending on the approach).

structures is relativized to the noun, the properties that can justify the qualification must be related to the type of lexical meaning the noun has. For nouns denoting professions (cf. (76)a-b above) they will have to bear on the professional quality. With nouns like *idiot*, they will have to be acts or features motivating the property that characterizes an individual as e.g. an idiot. With stereotypical nouns (when accepted), the qualification will be motivated by the individual in question displaying a stereotypical property associated with N. With arbitrary, non-gradable nouns, which fail to make any particular dimensions salient, the basis will be more unspecified; there is a wide range of extraneous, less specific, properties which can make a shirt, a car etc. stand out among shirts or cars. Interestingly, the example below shows that the qualities that justify the qualification expressed by the *quite*-structure may be explicitly mentioned in the linguistic context:

(79) I relate to little Finn Garrett. He's quite a boy: great imagination, logical thought processes, and is quite resourceful.[201]

Finally, as illustrated in (77) above, *quite an N* structures do not easily accept nouns on a stereotypical, figurative interpretation, where the referent would be allowed not to be an actual N but only have properties (stereo)typically associated with being an N.[202] In this, they differ both from *wh*-exclamatives and from internal *such*. We would like to suggest that a possible explanation for this lies in the original use of *quite* as a marker of truth value – cf. Bolinger 1972 who argues that *quite* developed from an identifier of truth value of a predication, i.e. an adverb commenting on full truth vs. partial truth, meaning something like 'identifying *x* as Y is fully justified'. This use of *quite* seems to survive especially (though not exclusively) in negative contexts:[203]

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[201] Source: http://www.amazon.com/Last-Invisible-Boy-Evan-Kuhlman/dp/1416957979

[202] The stereotypical, figurative interpretation of nouns, is, however, available when *quite* combines with a definite DP. Some examples of the *quite the N* structure are provided below (the examples in (iv) are from Bolinger 1972):

(i) Johnny is quite the boy.

(ii) a. Julie is quite the boy. [cf. (77)a]
b.. That old Cadillac my grandpa owned was quite the boat! [cf. (77)b]
c. Their new place is quite the palace. [cf. (77)c]

(iii) He is quite the fool.

(iv) a. He is quite the lawyer.
b. She was quite the belle of the ball.
c. He is quite the gentleman / man about town / soldier of fortune.
d. It is at once rich, tasty, and quite the thing.

As can be seen from these examples, any noun seems to be able to occur in this type of structure, and the interpretation seems to involve reference to generic types which the individuals in question approximate (cf. Bolinger 1972, Birner and Kaplan 2004). Note however that the "generic types" need to be defined in such a way as to also include stereotypical properties associated with N given the availability of stereotypical, figurative interpretations of nouns in this structure.

[203] According to Bolinger (1972) this is also the way in which *quite* is used when it combines with a definite NP, as well as with superlatives, where the property has already been boosted to the maximum:

(i) a. He is quite the fine gentleman.
b. She is quite the nicest person I know.

(80) a. I was often questioning my own gender. I was not sure what I was. I generally accepted that I was not quite a boy and really wanted to be a girl.[204]
b. No longer quite a boy, but still a boyish charm lingers...[205]
c. … an adventure of his own when he was catching wild horses in Texas with his adventurous cousin, at a time when he must have been quite a boy.[206]

This initial use of *quite* as an identifier of truth value may explain the absence of stereotypical, figurative readings for some speakers. It may be conjectured that for these speakers *quite* has retained an element of its original meaning, requiring that the individual be an actual N, while for others it has lost the entailment that the argument of the predicate be an actual N, and can be used to mean that a given individual is remarkable as an N, in any sense of N, whether actual or stereotypical. This variation in the use of *quite* by different speakers is somewhat parallel to the difference between the adjectives *real* and *true*: *real* can be used with nouns that receive figurative interpretations, while the entity described by *true* must belong to the category named by the noun (Bolinger 1972). For example, it is only in (81)a that he may be just a student behaving like a lawyer or in a way stereotypically associated with lawyers, while in (81)b he must be a lawyer by profession.[207]

(81) a. He is a real lawyer, the way he goes about proving his case.
b. He is a true lawyer, a credit to his profession.

In sum, on the view suggested here, *quite* would express that the individual under consideration deserves to be identified as an N and this qualification is justified by the individual manifesting some remarkable property. On such a view, *quite* would be more similar to the adjectives *real* and *true* mentioned above, which will be argued in chapter 4 (section 4) to make an epistemic/ evidential contribution to the interpretation, something like 'the speaker has good reasons to identify *x* as an N' or '*x* undoubtedly qualifies as an N [in the speaker's view]'. A full formal account, must be left to further research however.

To conclude, this section has shown that *quite an N* constructions are different from internal *such* in terms of distribution and interpretation. They also differ from *wh*-exclamatives, in the sense that they are more restricted in terms of the range of noun interpretations allowed. It has been suggested that *quite* is not a degree operator, but that it involves an interpretation of the individual being remarkable as an N.

[204] Source: http://conundrum131.tripod.com/childhood.htm
[205] Source: www.fanfiction.net›Anime/Manga›Naruto
[206] Source: http://www.bartleby.com/310/6/1.html
[207] The examples in (81) are from Bolinger (1972).

5.3 *Much/ more of an N*

In chapter 1 (§2.1.4) we briefly discussed the distribution and interpretation of predicative partitive structures (e.g. *more of an idiot*), which enable the use of a degree quantifier to modify nouns on an interpretation that looks more like a degree interpretation than the usual quantity interpretation such expressions get in the nominal domain. That is, these structures seem to quantify over properties rather than measuring the size of sets of entities in terms of quantity. This makes them more similar to degree modifiers as we know them from the adjectival domain, therefore, and raises the question whether this is indeed how they should be treated. This is the hypothesis we will investigate in this section. We will show that, although they do seem to involve operations on scales (namely typicality scales), these are not provided by the lexical noun, but are introduced by indefinite nominal predicates. In addition, these scales can be brought about with any noun. Consequently, occurrence in the predicative partitive structure cannot be used as a test for (lexical) nominal gradability.

It should be noted, first of all, that predicative partitive structures are rather specific to English, where they can be used with a variety of nouns. Other Germanic languages (e.g. Dutch), and Romance languages make use of a different syntactic structure: in Dutch and French the degree modifier (e.g. *meer*, *teveel* etc., *plus* etc.) directly combines with the DP, without the mediation of a preposition..[208,209]

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[208] A degree expression may also modify a DP predicate without the mediation of the preposition *of*, as in (i). In this case, the restriction to singular indefinites disappears. The DP can also be definite, for example (similarly to *quite*), as in (ii) (all examples are from Neeleman, van de Koot and Doetjes 2004; see also Sassoon 2007a).

(i) a. He is too much a scientist to care about such problems.
b. This is less a typical Italian opera than most of Puccini's.

(ii) I wonder how much the village idiot he is generally considered.

[209] In Romance another option is available, namely a degree operator may combine with a bare noun in predicative position; this is illustrated below for Romanian and Spanish, but similar facts obtain in French and Italian:

(i) a. E mai copil decât credeam. [Romanian]
is COMP child than thought.1SG
'He is more childish than I thought.'
b. Es muy niño. [Spanish]
is very child
'He is very childish/ young.'

The nouns seems to be recategorized as adjectives here (cf. also Le Bruyn 2010 for the suggestion, following Van Peteghem 1993, that these languages allow for an adjectival reanalysis of nouns): they accept degree words that exclusively select for adjectives, and they may also occur in other environments normally exclusively reserved to adjectives, such as modification of a noun or nominal pro-form:

(ii) a. unul mai copil ca mine
one.the COMP child than me
'one (who is) more child-like than me
b. una niña muy niña
a child.FEM very child.FEM
'a girl (who is) very child-like'

More work is needed to understand exactly what is happening in these cases – not in the least on the side of the interpretation. In (i)a, '(mai) copil' seems to mean something like 'having (more) properties typically associated with children' and is typically used when someone shows naïve or immature/ irresponsible behaviour. In (i)b 'muy niño' may also be used in this sense, but it may also simply refer to

As far as their distribution in terms of syntactic positions is concerned, these constructions are most frequently used in predicate position, i.e. after the copula *be*, or other copular verbs or verbs taking the noun as a secondary predicate (e.g. *become*, *make someone X* etc.), as well as with the verb *have*. The non-predicative use is not completely excluded, but it displays a lot more variation depending on the noun used, as well as on the verb used. The examples below illustrate some contrasts between the predicative and non-predicative use; according to Bolinger (1972) gradable nouns and semantically rich nouns can be used more easily in non-predicative positions (e.g. (83)a vs. (83)b).[210]

(82) a. It is less of a telescope than I had hoped.
b. *I bought less of a telescope that time.

(83) a. I received less of a surprise than I expected.
b. *I received less of a letter than I expected.

There is also a difference with respect to the type of verb used. Bolinger (1972) observes that, unlike non-personal (i.e. [-human]) gradable nouns, personal (i.e. [+human]) ones are acceptable in what he calls "indefinite" contexts, but not always in "definite" ones. By "indefinite" (vs. "definite") contexts he seems to refer to intensional contexts (i.e. with verbs like *seek*, *need* etc.), or more generally contexts that do not presuppose the existence of the individual (e.g. contexts where one wonders about a given qualification). The contrast is illustrated below.

(84) a. I need more of an expert for that job. [+human]
b. *I found more of an expert for that job.

(85) a. He told enough of a lie to convince them. [-human]
b. He committed too much of a nuisance to be forgiven.

Our searches of the Corpus of Contemporary American English seem to confirm Bolinger's data. Nouns denoting [+human] individuals (e.g. *more of a man/ boy/ woman/ expert/ artist* etc.) seem to be restricted to occurring in predicate position within such structures. Inanimate nouns tend to occur in modalised contexts (e.g. *might be seeing*), as arguments of intensional verbs and attitude verbs (e.g. *want*, *hope for*) or within non-argumental prepositional phrases (e.g. *working under even more of a microscope than before*, *forced me into more of a diplomatic role*, *someone with less of a past and more of a future* etc.) [211] Bolinger (1972) suggests

childhood age, so 'very young' (cf. also *desde muy niño* 'from early childhood'). It is not completely clear at this point exactly how the interpretation of these "adjectivized" nouns relates to the noun interpretations we discuss in this dissertation, in particular the stereotypical interpretation of nouns (cf. §3.4) and the interpretation of *more of an N* structures discussed in this section. But it seems to pattern more with adjectives in the view of nouns and adjectives that we suggest in chapter 5 (see also chapter 4, section 2, for relevant discussion).

[210] The examples in (82)-(85) are from Bolinger (1972).

[211] For example, searches including verbs like *find*, *talk to*, *meet*, *hire* followed by *more of a* have returned no hits (http://corpus2.byu.edu/coca/ consulted on 17.10.2011). A noticeable tendency is for the nouns occurring within predicative partitive constructions in non-predicative positions to be general,

that what determines this difference in distribution is very possibly the readiness with which the noun, whether gradable or non-gradable, admits of being interpreted in terms of an underlying predication. According to him, this is easier with gradable nouns than with non-gradable nouns – e.g. *He told enough of a lie to convince them* can be interpreted as 'what he told was enough of a lie to convince them'. But an example like **He wrote enough of a novel to earn the necessary money*. is not acceptable precisely because it is not likely to be interpreted as 'what he wrote was enough of a novel…'. We do not see at this point how to make his suggestion more precise, especially since the paraphrase in fact corresponds to an acceptable use of the noun with a predicative partitive construction in predicate position. Hence, it is not immediately clear what would exclude an interpretation that would correspond to an example like 'what he wrote was enough of a novel...'. At this point we will only conclude by restating the observation that the non-predicative use is easier in contexts where the existence of a particular individual is not presupposed, and we will return to this after considering the interpretation of these constructions.

In sum, the distribution of predicative partitive structures is rather restricted cross-linguistically, and, within English too, it displays a number of idiosyncrasies, which we will put aside in what follows.[212] The predominance of the predicative use, however, is significant, and should play a role in the analysis of these structures.

As for the interpretation of predicative partitive structures, it was shown in chapter 1 (§2.1.4) that they may be used with a variety of nouns, both with nouns typically taken to be gradable, as in (86), and with arbitrary, non-gradable nouns, as in (87), and may quantify over all and any properties associated with N. These include stereotypical properties, as in (88), as well as prototypical properties, as illustrated in (89). In this last respect these structures differ from all the other types of modification examined so far (i.e. internal *such*, *wh*-exclamatives, *quite*) which were seen not to allow prototypical interpretations.

(86) a. He's more of a fool than I thought.
b. It was so much of a failure that he decided never to try again.

(87) a. The BMW is more of a car than the Smart.
b. Martin is more of a linguist than anyone I know.

(88) a. Julie is too much of a boy to wear nylons or tights.
b. The old Cadillac that my grandpa owned was more of a boat than my dad's old Lincoln Continental.

(89) The robin is more of a bird than the penguin.

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abstract terms such as *role*, *approach*, *future* etc. (e.g. *taking more of a policy role*, *might be seeing more of a collective system*, *beginning to see more of a team approach*, *[they] see more of a future in crime* etc.).

[212] Predicative partitive structures also display certain idiosyncrasies with respect to the acceptability of various degree modifiers. The most frequent and most readily accepted structures are comparatives. When other degree words are used one finds more variation in acceptability. For example, *so*, *too*, *that* etc. are less easily accepted, but there is a lot of variation among them, and among the nouns that may be embedded in the respective structures (see Bolinger 1972 for more discussion).

The interpretation seems to be in terms of the appropriateness of calling the individual in question an N, in virtue of it exhibiting the attributes typically associated with N. This makes the interpretation of these structures very similar to metalinguistic comparison, where what is compared is not the extent to which a certain property holds of e.g. two individuals, but the appropriateness of applying one or the other description to an individual. Interestingly, with predicative partitive structures this sort of interpretation seems to be the one that is always available, i.e. also when two individuals are compared with respect to the same predicate, as in some of the examples above, not only when comparing the appropriateness of applying one or another description to the same individual as illustrated below (which is, incidentally, the majority of examples found):[213]

(90) a. My problems are more financial than legal.
b. He's more of a literary critic than a writer.

To sum up so far, partitive predicative structures are different from the structures with internal *such* in terms of interpretation, as well as range of distribution:[214] they can combine with any nominal, and seem to take in the set of all and any properties associated with the indefinite predicate nominal.

These may be understood as typicality dimensions in the sense of Sassoon (2007a). Sassoon proposes that nouns are inherently multi-dimensional; the dimensions need not obey any specific constraint: some may turn out to be common in the category, others may be based on cultural conventions or scientific observations; some properties are a relatively steady part of the linguistic definition (they are part of speakers' world knowledge), while other dimensions are completely episodic restrictions on relevant predicates in a particular context. This seems to cover the variety of properties that predicative partitive structures can take in. What predicative partitive structures seem to do is to measure and compare the typicality of entities in their respective categories. In other words, they seem to operate on a typicality scale. If this is the meaning that these structures manipulate, then we can also understand their metalinguistic flavour: the more typical of the category an entity is, the more appropriate will it be to call it an N.[215]

Interestingly, however, this interpretation in terms of a typicality scale only becomes accessible out of a singular indefinite nominal predicate – it does not seem to be available at the lexical level of N as Sassoon 2007a argues. This is indicated by the impossibility of using a degree modifier like *more*, inside the DP, to directly modify the lexical noun (cf. also chapter 1, §1.2):[216]

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[213] Sassoon (2007a) also notes that nouns can occur in what she calls "in between predicate comparison", where the degrees in two different predicates are compared, but she focuses on comparison structures where the degree quantifier applies directly to the nominal predicate, without the preposition *of*, as illustrated below:
(i) Bling Bling says "tweet" (I'm convinced he's more a bird than a cat).

[214] They also differ from structures with *quite* which do not always easily allow stereotypical interpretations.

[215] Nouns like *idiot* denote individuals characterized by one very salient property (idiocy), and this property will always weigh most in calculating the typicality of individuals. This, we suggest, results in the apparent degree interpretation that had been associated with such examples (e.g. by Bolinger 1972).

(91) *{a/ the} more {idiot/ bird} (than I thought)

Predicative partitive structures, which make the use of a degree modifier like *more* possible, seem therefore to involve an operation which coerces the meaning of the indefinite nominal predicate in such a way that it can be measured and compared (i.e. it can be the input to a degree modifier). In other words, an ordering is brought into existence which did not exist, or was not grammatically accessible, at the lexical level.[217] We may still understand it in terms of a typicality ordering, in the way proposed by Sassoon (2007a), but with this important difference that the ordering is not made available lexically, but as the result of a coercion operation applying to the indefinite nominal predicate. This operation presumably turns it into a set of properties associated with N that would correspond to the set of typicality dimensions in Sassoon's theory.

We would like to suggest that this coercion is also responsible for the restrictions on the syntactic distribution of predicative partitive structures noted above. It may be conjectured that its output is a property denotation, which is, therefore not compatible with an argumental, referential use of the noun phrase, on which it would (have to) introduce discourse referents into the discourse model.[218] This is is why these phrases are restricted to the predicative use or to contexts which allow a property interpretation of the nominal phrase, and do not require or presuppose the existence of an individual, namely intensional, non-referential.[219]

To conclude, in this sub-section we have suggested that predicative partitive structures, whose distribution and interpretation differs from that of the other structures examined in this chapter (especially internal *such*), may be analysed as operating on a typicality scale (where typicality would be understood in the sense of Sassoon 2007a). This involves a coercion operation which, however, applies not to the lexical noun, but to a singular indefinite nominal predicate. Thereby, though we are not dealing with a plain degree modifier/ operator that would select for a gradable expression, the nominals are coerced into a meaning that can be operated on by a degree quantifier. This coercion seems to be relatively easily performed with all types of nouns. As such, occurrence in this environment is not a reliable test for gradability.

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[216] Examples may be found where the degree modifier combines with a bare noun in predicate position. These are, however, rather infrequent and occur in what seem to be stereotyped combinations of things that come in pairs (of opposing elements). Our search of the Corpus of Contemporary American English has returned a few such combinations: *more fiction than fact*, *more symbol than substance*, *more adversary than ally*, *more boy than man*, *more insult than injury*. We take these cases to be similar to other uses of bare nouns in English that are restricted to such mostly idiomatic combinations, such as bare coordination: *husband and wife*, *mother and daughter*, *bow and arrow(s)*, *knife and fork*, *needle and thread* (cf. de Swart and Zwarts 2009, Heycock and Zamparelli 2003, Lambrecht1984).

[217] If this coercion seems to be easier with some nouns than with others, this may be because certain classes of nouns already make certain properties salient, which can be made use of in creating a typicality scale the partitive can apply to (e.g. gradable nouns, "semantically rich" nouns, stereotypical nouns).

[218] This characterisation was inspired by McNally's (2009) adaptation of Doherty's (1993) generalization concerning the distribution of subject relative clauses without *that* (e.g. *I have an idea might work* – McNally 2009): "subject contact clauses are licensed only in nominals that do not introduce persistent discourse referents into the discourse model" (p. 175).

[219] For property analyses of (certain types of) arguments of (certain types of) verbs, see Dobrovie-Sorin and Laca 2003, Dobrovie-Sorin and Beyssade 2004, van Geenhoven and McNally 2005 a.o.

5.4 Concluding remarks

In this section we have examined *wh*-exclamatives, structures with *quite* and predicative partitive structures, i.e. constructions which had been generally treated on a par with the so-called "degree" *such*. Given the analysis we proposed in section 3 for *such*, which was argued not to be a degree operator, the question arose how these other constructions should be analysed. It has been shown that they differ from internal *such*, as well as from one another, both with respect to the range of nouns they may modify and to the interpretation. On the one hand, this confirms the analysis we have proposed for internal *such*. On the other hand, it means that, in principle, having excluded a degree analysis for internal *such* would not entail the same for these constructions. Indeed, for *wh*-exclamatives we have suggested that an analysis in terms of a degree operator may be maintained. On such an account, however, the way the operator is supplied with the necessary gradable meaning on which it can operate, namely by the insertion of a contextually salient property, a mechanism which is easily and generally available, makes the lexical gradability of the noun irrelevant, as well as harder to detect. As for *quite*-structures, we suggested that they need not be analysed as degree constructions, but rather as conveying that the individual in question stands out in its domain. Finally, predicative partitive structures have been argued to indeed involve some sort of coercion, whereby the degree quantifier can apply to a typicality scale. This, however, is not lexically available with (a particular class of) nouns, but is obtained out of an indefinite nominal predicate with virtually any noun. As such, occurrence in this structure cannot be used as a test for (lexical) gradability.

6 Conclusions

In this chapter we have examined the case of *such.* A fundamental distinction had been proposed in the literature between a "kind" *such* and a "degree" *such*. We have argued against this view and showed that an analysis as a degree operator cannot be maintained. We have proposed that "internal" *such* (thus labelled here in order to distinguish it from the usual anaphoric and deictic uses of the "kind" *such*, or "external" *such*) is also a kind-referring expression. Internal and external *such* differ in the way the sub-kinds are identified. In the case of internal *such*, the requirement is for salient sub-types that are identified by natural consequences (which are expressible by means of result clauses). The nouns one might want to call gradable turn out to be only a subset of the nouns that make available the required sort of sub-types. In the last part of the chapter we briefly examined *wh*-exclamatives, *quite*-structures and predicative partitive structures (*more of an N*). The range of distribution, the mechanisms by which gradability may come into play, in those cases where it seems to be indeed involved, or the structural level where a gradable meaning becomes available do not allow us to make a distinction between lexically gradable and non-gradable nouns. It turns out, therefore, that occurrence in these

environments cannot be used as a reliable test for (lexical) nominal gradability, or as evidence in favour of the existence of gradable structures in the semantics and/or syntax of nouns that would be similar to what is found with gradable adjectives. Similarly to what we saw in the previous chapter, however, gradability may interact with other phenomena, such as the identification of sub-kinds or 'remarkability' judgments.

Chapter 4 "DEGREE ADJECTIVES"

1 Introduction

This chapter focuses on a phenomenon that is central to the topic of gradability in the nominal domain, namely modification by degree adjectives. From the discussion of gradability tests in chapter 1, the availability of modification by degree adjectives emerged as the seemingly most restricted environment sensitive to nominal gradability. The central question that this chapter addresses, especially in view of the negative conclusions of previous chapters in connection with other potential test for gradability, is whether degree adjectives are, indeed, a reliable test for gradability in the nominal system.

To recall the basic observation, consider examples (1) and (2). The relevant interpretation of the adjectives considered is the one they receive in the examples given in (1). It seems that when they modify nouns that encode a gradable property in their lexical meaning they indicate that this property holds to a high degree. When they modify ordinary, non-gradable nouns, as illustrated in (2), these adjectives receive a different interpretation, namely their basic, literal interpretation: concrete physical size in the case of *big*, negative qualitative evaluation in the case of *terrible* or completeness in the case of *complete*.

(1) a. a big {idiot/ eater}
b. a terrible {coward/ bore}
c. a complete idiot

(2) a. a big {lad/ house}
b. a terrible {doctor/ idea}
c. a complete description

The interpretation of the adjective-noun combinations in (1) seems to parallel that of the corresponding adverb-adjective combinations illustrated in (3) below, in the sense that in all of these examples, the modifier contributes an indication of the high degree to which the property denoted by the modified expression holds.

(3) a. very idiotic

b. terribly boring
c. completely idiotic

In other words, the relation between the adjective and the noun it modifies seems to parallel the relation between a degree modifier and a gradable adjective. Therefore, the question that arises when faced with such examples is whether the adjectives in (1) indeed function as degree modifiers or operators in the nominal domain similarly to how the expressions in (3) are generally argued to function in the adjectival domain, and whether their distribution and interpretation can be taken as evidence in favour of the presence of a semantic gradable structure and of a DegP in the syntax of certain nouns. This is the question we will try to answer in this chapter.

As already noted in chapter 1, degree adjectives make up a rather heterogeneous class and their use is often collocational in nature, or, at least, they have a distribution that is marked by many lexical irregularities within English, as well as across English and Romance among otherwise similar adjectives. These idiosyncrasies must be acknowledged. However, if one puts them aside, certain patterns emerge quite clearly. In principle, there are three potential classes of candidates to the status of a degree adjective in the sense relevant here, which exhibit different properties. These are classes that were already illustrated in chapter 1, namely adjectives which in their basic, non-degree use refer to size (e.g. *big*, *huge*, *enormous* etc.), evaluative adjectives (e.g. *terrible*, *amazing*, *incredible* etc.), and the so-called adjectives of purity and veracity (e.g. *real*, *true*, *perfect* etc.). In this chapter, we will re-examine in more detail the distribution of these adjectives with respect to different types of nouns, as well as with respect to syntactic position (i.e. attributive vs. predicative uses). This investigation will result in a necessary reconsideration of the status of the alleged degree adjectives included in chapter 1. For example, *real* and size adjectives will be argued not to be degree operators, while for other adjectives it will also be shown that different analyses are possible. The behaviour of each class will be examined in turn.

Section 2 focuses on size adjectives. We will examine the distributional patterns of these adjectives and their consequences for possible analyses of the adjectives, as well for the use of such modification as a test for gradability. As it turns out, the facts here do not conclusively support a degree analysis, but rather favour an alternative account in terms of abstract size, on which the adjectives do not manipulate gradable structures that nouns would be assumed to have. Section 3 focuses on evaluative degree adjectives, a class which exhibits an even larger amount of lexical variation in terms of collocational restrictions. We will examine their distribution, and the differences they exhibit as compared to size adjectives, and conclude that, although at first sight they may be a better indication of gradability, they also show differences as compared to their adverbial counterparts that function as degree modifiers in the adjectival domain (e.g. *terribly* etc.). We therefore suggest an alternative way of deriving the degree-like interpretation. Section 4 re-examines the distribution and interpretation of *real*-type adjectives and argues for a different account of these adjectives: not as degree adjectives, but as adjectives whose semantic contribution is rather to be understood in terms of epistemicity/ evidentiality. Subsequently, we briefly consider totality adjectives such

as *complete*, *absolute* etc., which seem to be compatible both with an analysis as degree expressions, and with an analysis similar to that proposed for *real*-type adjectives. The main conclusion of this chapter will be that there is no clear evidence for the existence of adnominal degree operators/ modifiers in a parallel way to what is generally assumed for the adjectival domain.

2 Size adjectives

In this section we examine the first case of expressions that look like degree modifiers in the nominal domain, namely size adjectives, and show that the facts do not necessarily support an analysis of these adjectives as degree expressions, whether on a degree-based or a degree-less approach to gradability. In order to account for their syntactic and semantic behaviour it is not necessary to assume that they directly manipulate gradable structures (whether represented in terms of degrees or orderings). We will propose that an alternative analysis, which takes size adjectives to always be predicates of (abstract) size, can be extended to all cases and the sometimes peculiar combinatorics with the noun can be put down to mechanisms that are independently needed in order to account for non-intersective adjectives more generally. Modification by size adjectives turns out to differ from degree modification in the adjectival domain; even though the resulting interpretation is very similar, the mechanism by which it is brought about is different. This will also have consequences for our understanding of gradable nouns.

2.1 Distribution and interpretation

In this section we examine the distribution of size adjectives with respect to types of nouns, as well as the interpretation obtained in these contexts. Putting aside some distributional idiosyncrasies that will be briefly discussed towards the end of the section, it seems that adjectives like *big* can be used quite generally as modifiers of nouns that encode a gradable property in their lexical meaning.

In their basic, literal use, adjectives like *big*, *enormous*, *huge* etc. receive an interpretation in terms of concrete, physical size, as in (4). When they modify nouns which encode a gradable property in their lexical meaning, the adjectives seem to measure this property and, thus, contribute a (high) degree interpretation. This is illustrated in (5), where the adjectives are shown to modify gradable nouns, whether [+human] or [-human], count or mass.[220] For example, *a big idiot* is 'a very idiotic person'. In other words, the relation between the adjective and the noun it modifies seems to parallel the relation between a degree modifier (e.g. *very*) and a gradable adjective (e.g. *idiotic*, *foolish* etc.).

[220] Note, however, that with abstract mass nouns the adjective *great* is used in English, not *big*, while in the Romance languages there is no such difference: French *grand*, Romanian *mare* etc. will be used both with count and with mass nouns.

(4) a big {lad/ house}

(5) a. a {big/ huge} {idiot/ beer-drinker/ football fan}
b. great courage/ immense pleasure
c. a huge blunder/ a gargantuan appetite/ a big mistake

As shown in chapter 1, nouns under figurative stereotypical interpretations (of the type found with internal *such*, for example – cf. chapter 3, §3.4) cannot be so modified by degree adjectives. The resulting interpretation of such adjective-noun combinations is fundamentally different: only the basic, literal meanings of the adjective and noun are available. Thus, in the examples in (6) below, the interpretation is in terms of concrete size, age or importance of actual boys, lawyers and palaces. These adjective-noun combinations cannot be used to describe someone who is very boyish, someone who is very lawyer-like or litigious, or a place which is very palace-like, in a way parallel to (5) above.

(6) a. a big boy
b. a big lawyer
c. a big palace

The facts are not always as clear-cut. A possible counterexample is given in (7), where it seems that *baby* can be used in its figurative meaning and intensified by *big*:

(7) He is just a big baby.

However, this example may be understood as a conjunction: something like 'big (~grown-up) and a baby'. Alternatively, it might be that this meaning of *baby* has become lexicalized, i.e. it has become so conventionalized that it has developed into a separate lexical entry/item of the type *idiot* or *fool*. This seems to be confirmed by the fact that *baby* on this interpretation can also be modified by evaluative adjectives like *terrible*, which also otherwise fail to be compatible with nouns interpreted figuratively (see §3.1):

(8) I am a terrible baby when it comes to pain.

This conclusion is also suggested by the fact that certain conventionalized epithets may also accept such modification, while epithetic uses relying more strongly on metaphorical interpretations resist it. The contrast is illustrated below:

(9) a. He's a big {bully/ jerk}.
b. #She's a big angel.

This seems to suggest that there is indeed a distinction among what may be called figurative, stereotypical interpretations of nouns. Some, like *boy*, denote (unordered and variable) sets of properties and for an individual to qualify as such they must

have one or more such stereotypical properties; in chapter 3 it was argued that these are not gradable meanings. Others, like *baby*, seem to have lexicalized as gradable nouns similar to *idiot*, in the sense that they denote a set of individuals characterized by one salient property, e.g. their immaturity for *baby* just like idiocy in the case of idiots. The latter type may be modified by size adjectives on the relevant reading. (see §2.4.1 for more discussion)

Having seen the types of nouns that can be modified by size adjectives on the relevant reading, a few remarks are in order concerning the adjectives themselves, and the variation found among them. First of all, while *big* is a rather 'neutral' adjective, adjectives like *huge*, *enormous*, *colossal* etc. encode a notion of extremeness in their lexical meaning and they have been treated as examples of 'extreme' adjectives in the literature (cf. Cruse 1986, Paradis 2001, Morzycki 2010). Most of the adjectives in the class that will be discussed in section 3, namely evaluative adjectives, are also 'extreme' adjectives in this sense (e.g. *terrible*); others seem to correspond to 'extreme degree modifiers' (cf. Morzycki 2010), i.e. degree modifiers that seem to occur only with expressions that are in some sense 'extreme' (e.g. *absolute – absolutely*). In other words, the distinction between neutral and extreme adjectives cross-cuts the classification of degree adjectives based on their basic meaning component – e.g. size, qualitative evaluation etc. However, the distribution of degree adjectives (with respect to types of nouns and to syntactic position, as well as their interpretation in these contexts) is differentiated along the lines of the latter, rather than the former, aspect of their meaning, as will become clearer once the other classes of degree adjectives are also considered in the coming sections. We will, therefore, continue to classify the adjectives based on their literal meaning, namely size vs. qualitative evaluation, and treat each of these classes in turn.

In addition to the general size adjectives considered so far, there are also some other dimensional adjectives which may be used to give rise to degree interpretations, such as *high* and *deep*. These, however, display a more idiosyncratic behaviour and seem to exhibit collocational restrictions in terms of an item-to-class selectivity. For example, *high* can be used with abstractions relating to anything scaled up, whether literally (e.g. *probability, visibility, pressure, intelligence*), or figuratively (e.g. *fury, indignation, temper, admiration, ambition, influence*) (Bolinger 1972).[221]

(10) a. high acclaim
b. *deep acclaim
c. deep disgrace
d. *high disgrace

Other idiosyncrasies are found among size adjectives. In English, for example, *great* and not *big* is used with abstract mass nouns (e.g. g*reat courage*, not: **big*

[221] See Bolinger (1972) for more discussion of the factors influencing the availability of modification by *high.*

courage).[222] In addition, unlike *big*, the rather similar adjective *large* cannot be used with a degree interpretation:

(11) ≠a large idiot

Morzycki (2009) suggests this is because *large* is not a size adjective in the same way *big* is; while general size adjectives like *big* are indeterminate in the sense that they can measure along a number of different types of scales (e.g. area, population, 'pure' size) among which also the abstract scale of degree size, the adjective *large* is lexically specified as only measuring physical size and does not have degrees in its domain. If this sounds more like restating the problem in different terms, it is in fact not easy to find a more explanatory account – it does seem to be a matter of lexical restriction. One might be tempted to think that the availability of 'degree measurement' is dependent on a general size-related meaning, such as the one *big* has, while *large* might be understood rather in more specific size-related terms, such as spaciousness or volume. This cannot be completely correct, however. A more specific meaning does not necessarily exclude the availability of a degree interpretation: in French, for example, the adjective *gros* meaning 'fat' or, in any case, making reference to volume, can give rise to degree interpretations, as illustrated below:

(12) a. un gros con
a fat idiot
'a big idiot'
b. un gros mangeur
a fat eater
'a big eater'

[222] Note also the rather collocational combinations of the adjective *heavy* with nouns in English, a collocation which persists across categories (see also van der Wouden 1994, 2011 for some remarks on collocations of this type.):

(i) a. heavy {smoker/ drinker}
a'. heavy reliance
b. to {smoke/ drink} heavily
b'. to rely heavily on something

(ii) a. *heavy eater
a'. ??heavy patience
b. *to eat heavily
b'. *to be heavily patient

While *big smoker*, *big drinker* and *great reliance* are not ruled out, they are clearly dispreferred as compared to the collocational combinations *heavy smoker* and *heavy drinker*: a simple search in the Corpus of Contemporary American English returns 2, 8 and 6 examples, respectively, of the former and 46, 64 and 146, respectively, of the latter (http://corpus2.byu.edu/coca/ consulted on 15.10.2011). In other cases, the differences are not as significant, but some preference still exists in favour of the more collocational combination as compared to the use of the more general adjective *big* – e.g. *heavy losses* vs. *big losses*. Note that the adjective *heavy* also enters collocations with other types of nouns that do not follow the same patterns as the types of nouns considered in this chapter – e.g. *heavy {rain/ snow/ traffic}* (also: *to {rain/ snow} heavily*). More corpus research might have very interesting insights to offer as to the possible patterns of distribution and interpretation, but we have to leave such investigation to future research and will rely from now on on data that is less collocational and idiosyncratic in nature.

We will, therefore, retain these as lexical idiosyncratic restrictions and put them aside in what follows. In spite of these idiosyncrasies, some patterns emerge quite clearly and it is on these that we will focus in the remainder of this chapter.

There are two relevant properties of size adjectives which need to be examined as they play a role in deciding what the most suitable account of size adjectives is. One is their syntactic distribution and associated interpretation, i.e. "the position generalization" (cf. Morzycki 2009). This will be discussed in the next section. The other one is the lack of low degree interpretations obtained by means of (small) size adjectives, or "the bigness generalization" (cf. Morzycki 2009), which will be discussed in §2.3.

2.2 Syntactic distributional patterns and their implications

This section examines the syntactic distribution of size adjectives on their degree reading and discusses its implications for possible approaches to these adjectives, in particular for their possible status as degree operators or modifiers. The initial observation that the relevant reading of size adjectives is restricted to the prenominal position has prompted Morzycki (2009) to analyse them specifically as degree modifiers. However, it will be shown in this section that, on the one hand, this restriction has relevant exceptions and that, on the other hand, the distributional pattern displayed by size adjectives is more generally found with non-intersective adjectives, and is mostly independent of gradability. Thus, analysing these adjectives as degree modifiers (either in terms of applying to a degree argument, or as degree functions that apply to an inherent ordering) amounts to a very specific analysis of a sub-class of non-intersective adjectives. It will be shown that the alternative analysis of the predicative cases, namely on in terms of predicates of abstract size (cf. the suggestion made by Morzycki 2009 for a subset of the cases), can in fact be extended to all cases, once we admit the existence of mechanisms that are independently needed. As such, the position generalization cannot be taken as an argument to maintain a degree analysis for any of the cases.

2.2.1 The position generalization and the degree analysis

The degree reading of size adjectives is normally restricted to the prenominal attributive position; this is impossible in predicative position or in the postnominal attributive position (cf. Siegel 1976, Bouchard 1998, 2002, Demonte 2008, Morzycki 2009 a.o.). This is shown by the following examples (taken or adapted from Morzycki 2009):

(13) a. a big idiot
b. That idiot is big.
c. an idiot bigger than anyone I know

In (13)a the adjective is used in the attributive prenominal position and receives the relevant degree interpretation. In (13)b-c, where the adjective is used predicatively and postnominally, the intended degree reading is not available. The adjective can only be interpreted in its literal meaning in terms of concrete size in these positions. The examples in (13)b-c are not about individuals who are idiotic to a high degree, but can only be about individuals who are literally, i.e. physically, big.

This restriction on the syntactic position also correlates with the fact that such [A N] combinations entail that 'X is N', but not that 'X is A'. In addition, the fact that the two possible interpretations of these adjectives are distinct is indicated by the fact that one can be affirmed while the other is negated, without a contradiction ensuing (Morzycki 2009):

(14) She's a big eater, though she's not (very) big.

Morzycki (2009) takes this restriction on syntactic position, which he labels the "position generalization", as an argument in favour of the idea that these are degree modifiers. Given the degree reading that these adjectives give rise to and its restriction to the prenominal attributive position, an analysis of size adjectives as degree modifiers seems justified. In principle, such a view can be implemented either in a degree-based approach or in a degree-less one. In what follows we will sketch both types of approaches and their predictions, which turn out to be very similar.

Morzycki (2009) proposes an analysis of gradable nouns and their modifiers which is framed within a degree-based approach to gradability, which, in a parallel fashion to the corresponding analyses put forth in the adjectival domain, makes explicit use of degrees. Morzycki argues that gradable nouns like *idiot* are lexically associated with scales and should be semantically defined in terms of degrees (see also Matushansky 2002b, Matushansky and Spector 2005, who make similar assumptions though on different grounds). Morzycki adopts a Kennedy-style analysis of gradability, in the sense that he assumes both gradable adjectives and gradable nouns to denote measure functions from individuals to degrees, i.e. type $\langle e,d \rangle$ (cf. Kennedy 1999a,b, 2007a). This semantic understanding of gradability is also associated with a particular syntax. Just like gradable adjectives, gradable nouns are assumed to project a dedicated functional projection, $\text{Deg}_{\text{N}}\text{P}$, as part of their extended nominal projection. This hosts degree morphemes that turn the measure function into a regular predicate (type $\langle e,t \rangle$) as needed. In the absence of an overt degree expression, a phonologically null operator *pos* is postulated, in full parallelism to what has been proposed for the adjectival domain. As for size adjectives like *big*, on their degree use, he analyses them as degree modifiers, which is motivated by the fact that they can take their own degree modifiers, as illustrated below; this indicates that they are phrasal rather than being degree heads themselves (as he proposes for other degree adjectives).[223]

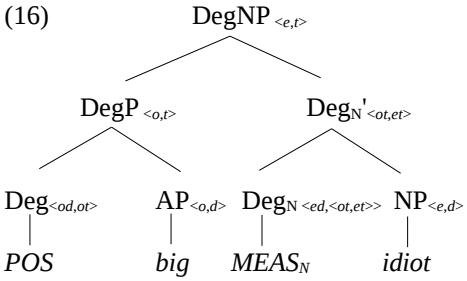
[223] Similar facts obtain in other languages too, for example in French (contra Knittel 2005):

(i) a. un {très/ si/ plus} gros con
a {very/ so/ more} big idiot
b. un {très/ si} grand voyageur
a {very/ so} big traveller

(15) a. George is a really big idiot.
b. George is a bigger idiot than Dick is.

Semantically, he analyses them similarly to ad-adjectival measure phrases, namely as predicates of degrees (following Schwarzschild's 2005 proposal for measure phrases), i.e. type <*d*,*t*>. In this use, size adjectives measure along a scale of degree size, just as in other cases they measure along scales of area, population, 'pure' size etc. In other words, size adjectives are indeterminate, and have degrees themselves in their domain. He therefore makes use of an abstract scale of degree size, onto which any degree can be mapped (cf. Bale 2006, 2008). In order to reflect the fact that *big* can measure both individuals and degrees, he ultimately adopts an ontology with a type *o*, which includes objects of both types (*e* and *d*). Hence the denotation of *big* is of type <*o*,*d*>, and the type of its extended projection is of type <*o*,*t*>. Syntactically, he proposes that size adjectives are located in the specifier of Deg_NP, whose head is occupied by a null operator, which is a version of the *Meas*-head proposed by Svenonius and Kennedy (2006) to account for AP-modifying measure phrases. The syntactic structure proposed by Morzycki (2009) is given in (16):

(16)



This account predicts the impossibility of size adjectives on their degree use in predicate position for two reasons, syntactic and semantic. First, they are connected with a particular functional projection which is part of the extended nominal structure, hence unavailable outside of the DP. Secondly, they are predicates of degrees and an argument of the right sort is no longer available to the adjective used predicatively. This is because the measure function, which is the denotation of the noun, must be first turned into an ordinary predicate before the noun can interact with other modifiers or functional elements within its extended nominal projection. So once the subject DP is fully built, there is nothing of the right type (namely defined in terms of *d*-arguments) that the degree adjective can be predicated of.

Alternatively, the same intuition could be implemented in a degree-less approach to gradability, such as that proposed by e.g. Doetjes, Constantinescu and Součková (2011) and Doetjes (2009) (see chapter 1, §1.1.2.2 for more detailed discussion). On such an approach, gradability is not a matter of degrees but a matter of the presence of a (salient) ordering, and relations between degrees are not made use of in the semantics. Instead, degree structures are represented as relations between degree functions. Adopting such a view for the analysis of the facts discussed here would amount to analysing adjectives such as *big* as degree functions, similarly to degree

expressions like *very* in the adjectival domain. Accordingly, when *big* applies to a gradable noun like *idiot* it will result in a subset that includes individuals which are ordered relatively high in the domain of the noun. Just as degree expressions such as *quite*, *very* and *extremely* correspond to degree functions that are intrinsically ordered with respect to one another, an ordering that is independent of the specific adjective to which they apply, it may be conjectured that adjectives like *big* and *huge*, for instance, correspond to degree functions that are similarly ordered. That is, *huge* will always result in a more restrictive set than *big*. In other words, *huge* corresponds to a degree function that is more restrictive, or informative, than *big*: $\delta_{huge} \subset \delta_{big}$. Such an approach, which analyses these adjectives as degree functions, also predicts that the non-intersective reading should not be available when the adjective is used predicatively, and, hence, is applied to something of type <*e*>: the adjective needs to be adjacent to the noun which lexically provides the ordering on which the degree adjective operates, and to which it applies as a function to its argument.[224,225]

The two approaches, therefore, make very similar predictions with respect to the syntactic behaviour of size adjectives on their degree use, and both account for the position generalization.

2.2.2 Exceptions and an alternative account

As already noted by Morzycki (2009), there are a number of exceptions to the position generalization, as the examples below show:[226]

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[224] Note also that analysing size adjectives as degree functions amounts to a very specific version of the analysis of non-intersective/ intensional adjectives as predicate modifiers as proposed by Siegel (1976). As such, they would be expected to be barred from the predicate position just as an adjective like *former* is:

(i) a. the former president
b. *the president is former

See §2.2.3 and §2.4.2 for more discussion.

[225] Note that in the discussion of the predictions made by the two approaches we have been assuming that the subject DP is never of type <*d*>, which would allow the adjectives to occur predicatively on the relevant reading. This assumption will be made explicit when we propose the alternative account in the coming sub-sections. We take instead DPs such as *John's stupidity* to denote instances of properties (or tropes), and we take these to be abstract objects of type <*e*> (cf. Moltmann 2003, 2004a,b, 2007, 2009, 2011). The same view may be extended to even more abstract objects such as those possibly denoted by nouns like *degree* (e.g. *The degree of responsibility was huge.*).

[226] Similar cases are found in French (cf.also Grossmann and Tutin 2005, Marengo 2005):

(i) a. Le problème a été énorme les premières années.
the problem has been enormous the first years
'The problem was huge during the first years.'
b. L'échec a été si grand que...
the.failure has been so big that...
'The failure was so big that...'

(ii) a. Ma joie/ Son indifférence/ Sa générosité/ Sa gentillesse} était grande.
my joy/ his indifference/ his generosity/ his kindness was big
'{My joy/ His indifference/ His generosity/ His kindness} was great.'
b. Son chagrin est immense.
his sorrow is immense
'His sorrow is immense.'

(17) a. Harvey realized that the mistake was pretty big.[227]
b. When I lived there over 5 years ago, the [stray and feral cat] problem was huge.[228]
c. For Peter, that failure was big, maybe too big to overcome.[229]
d. The success was huge.[230]
e. The mess left behind was huge.[231]

(18) a. His sorrow was enormous.
b. Her generosity was great.

In these examples, the interpretation of the adjectives does not seem to be distinct from that of their corresponding prenominal uses – e.g. *big problem*, *huge mess*, *enormous generosity* etc. The availability of the predicative use of degree adjectives seems to depend on the type of noun used as a subject. The cases considered before (cf. examples (13)), where the degree interpretation was seen to be restricted to the attributive prenominal position, were examples of [+human] nouns. The examples in (17)-(18) above, where the adjectives can occur predicatively, contain [-human] nouns, whether they are count nouns (e.g. *problem*, *mistake* etc.) or mass nouns denoting states, emotions or feelings, qualities (e.g. *sorrow*, *generosity* etc.).[232] The question then arises as to how these two types of patterns should be interpreted (and reconciled).

Morzycki (2009), for whom the position generalization is a necessary feature identifying degree adjectives as such, adopts the following position with respect to these facts. First, he argues that these are not instances of the 'degree use' of size adjectives; they are ordinary predicative adjectives whose interpretation is not in terms of degree, but in terms of size, though in a metaphorical or abstract sense, and only has a degree flavour because of the type of noun used. Secondly, he argues that not only are these not instances of the degree use of the adjective found in *big idiot*, but also that these nouns are not gradable, which, in the framework he adopts, translates as saying that they are not to be represented as being of the same semantic type as gradable adjectives (namely type <*e*,*d*>), while nouns like *idiot* are.

His first conclusion is correct, and it is, in fact, a necessary consequence of analysing these adjectives as degree expressions, as shown in the previous sub-section. On any type of approach to gradability, a degree operator or modifier would need to be adjacent to the noun which provides the gradable structure on which it

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227 Source: http://community.foxsports.com/papaclinchsaint/blog/2010/04/17
228 Source: http://www.wnep.com/news/countybycounty
229 Source: http://andyatfaith.blogspot.com/2010/04/one-of-most-amazing-things-about-god-is.html
230 Source: http://apps4ottawa.ca/en/ideas/107
231 Source: www.fanfiction.net/s/3513784/1/ninja_sleepaway_camp
232 Note that the degree readings arise with abstract mass nouns when they refer to instances, not kinds, of properties. Thus, the relevant reading is only available in (i)a, while in (i)b, a generic sentence, this reading is not available, and only the regular qualitative reading of the adjectives *great* and *amazing* obtains, while the size adjective *huge* is odd.
(i) a. John's patience is {great/ amazing/ huge}.
b. Patience is {great/ amazing/ ??huge}.
This also confirms our analysis that such adjectives are predicated of instances of properties (see §2.4 for more discussion).

operates and in whose extended functional projection the DegP that hosts them is located. In other words, adnominal degree operators or modifiers can only appear in a prenominal configuration, and will be banned from the predicative position. Consequently, any predicative uses that appear to exist will need to be excluded as cases of degree modification and accounted for in a different way. Morzycki points out that some ordinary size readings of size adjectives have a roughly degree-like flavour because of the nature of the modified NP. He argues that these are not true degree readings but rather size readings that make reference to size along a possibly abstract dimension, one that may correlate with some intuitive sense of extremeness or severity. In his view, these uses, unlike true degree readings, seem to be in some important sense genuinely metaphorical. His main argument that such cases pattern with ordinary size readings rather than with degree readings is precisely that they fail to accord with the position generalization as they can occur in predicative position.

This seems indeed a plausible approach to the data in (17). When the subject is a [+human] individual-denoting nouns like *idiot* the predicative adjective attributes a property to the individual referred to by the subject DP. The only available interpretation then is in terms of physical size of the individual. When the subject is a [-human] noun which describes an (abstract) object via a property (e.g. *failure*, *mess*, *problem* etc.) or names a property (e.g. *sorrow*, *generosity* etc.), using an adjective like *big* predicatively results in an interpretation that seems indistinguishable from the degree reading obtained when it is used attributively (as in *big idiot*). The degree interpretation here is, however, only apparent and it is due to the way size adjectives are understood in the context of the particular types of nouns used, namely nouns which denote abstract objects, or instances of properties (cf. Nicolas 2004, 2010, Moltmann 2004a,b for such proposals concerning the semantics of abstract mass nouns). In sum, in some cases, due to the type of noun, size adjectives receive an interpretation which is very similar to the degree-reading, without the actual manipulation of degrees. The adjectives are not (and cannot be) degree modifiers, but regular descriptive adjectives that get an abstract size reading, which only mimics the degree interpretation.

However, objections may be raised in connection with Morzycki's second conclusion. Analysing the predicative uses as abstract size predicates, as suggested above, does not automatically entail that these adjectives can never function as degree modifiers when used attributively with these nouns. So these nouns could still in principle be gradable.[233] Nothing excludes the possibility that, when used as an attributive modifier of such nouns, a size adjective like *big* is ambiguous between an abstract size adjective (which can also be used predicatively) and a degree

[233] There is some unclarity about his position with respect to cases like (i) below, where the subjects are abstract mass nouns. He suggests these are "expressions that seem to involve what might be called 'nominalized' degrees" and *big* (but also *small* – the importance of which will become clearer in §2.3) can measure their size (i.e. the size of degrees themselves) "though the results often have the stilted quality of circumlocutions".

(i) {George's idiocy/ Clyde's enthusiasm for goat cheese/ Herman's dorkiness} is {big/ enormous/ substantial/ small/ tiny}.

But measuring the size of the degree is precisely what he claims such adjectives do when they are used attributively with nouns like *idiot*, where he argues they are degree modifiers (which are, by definition, restricted to occurring within the DP), which he analyses as predicates of degrees.

modifier within Deg_NP (which is restricted to the attributive use). When used attributively with these nouns (e.g. *enormous mistake*, *huge blunder*, *enormous generosity* etc.) it would be, however, almost impossible to distinguish between the two readings. The potential degree reading obtained in the attributive use and the abstract size reading, which is the only one available in the predicative use, would be indistinguishable. This would also explain the contradiction pointed out by Morzycki and illustrated in (19), and the contrast with (20), which contains a [+human] individual denoting noun and where the degree reading available in the attributive position is clearly distinct from the concrete size interpretation available in predicate position:[234,235]

(19) a. #That mistake wasn't enormous, but it was an enormous mistake.
b. #That problem wasn't huge, but it was a huge problem.

(20) a. Gladys isn't very big, but she is a very big beer-drinker.
b. Harry isn't enormous, but he is an enormous idiot.

Unlike with [+human] individual-denoting nouns, the two interpretations would be virtually indistinguishable with nouns denoting abstract objects characterized by a property or directly referring to such abstract properties, without actually ruling out the possibility that an actual degree modification use is possible for *enormous mistake*. In other words, what seems to make the difference between nouns like *idiot* and nouns like *mistake*, *blunder*, *generosity* (and to underlie the contrast illustrated above) is that the former have concrete size while the latter have abstract size. But is this enough to warrant that these classes of nouns should be assigned different semantic types (i.e. $\langle e,d \rangle$ vs. $\langle e,t \rangle$)?

Given the similarity between the abstract-size reading and the degree reading, the question arises whether the analysis proposed for the predicative cases discussed above could be extended to all cases. Or is there really evidence in favour of analysing size adjectives as degree modifiers in any of the cases (e.g. in examples like *big idiot*)?

We will argue that in fact there is no conclusive evidence to support an analysis of size adjectives as degree modifiers in any of the cases considered so far. In the next sub-section, we will show that the position generalization is not enough to analyse these adjectives as degree modifiers. This distributional pattern is generally found with non-intersective adjectives, independently of degree and gradability. This suggests that size adjectives should be considered within the broader context of non-intersective modification, and that an alternative account which makes use of mechanisms that are independently needed should be taken more seriously. This will be discussed in §2.4 after a discussion and rejection of another possible argument in

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[234] The examples in (19)-(20)are from Morzycki (2009).

[235] Note also that if the examples in (19) are made more parallel to (20), by choosing as a subject a different noun, which does not support the same sort of abstract size interpretation of the adjective, the same result as in (20) is obtained (i.e. no contradiction):

(i) Their intervention was {not big/ small}, but it was / turned out to be a huge mistake!
The war was small(-scale)/ short… but it was a huge/ terrible mistake.

(ii) John is {not big/ small}, but he's a big idiot.

favour of a degree analysis of size adjectives, namely the "bigness generalization", in §2.3.

2.2.3 The broader picture: non-intersective adjectives

The position generalization is not enough to assume that these modifiers depend on the presence of gradable structures in the semantics and of a $Deg_N P$ in the syntax. The restriction to the prenominal position is a property exhibited by a large number of adjectives which do not give rise to degree readings.

It has often been shown in the literature that certain adjectives (namely non-intersective ones) are either restricted to the prenominal attributive position, or if apparently the same adjective can appear in both positions (i.e. both prenominal, and postnominal and predicative) then the different positions correlate with distinct meanings. The first class is illustrated in (21) below by the English temporal intensional adjective *former*. The second type is instantiated by adjectives like *ancien* in French: in the prenominal use illustrated in (22)a, it is intensional and corresponds to the English adjective *former*, while when used in the postnominal and predicative positions, as in (22)b,c, it receives an intersective interpretation ('old, aged').

(21) a. the former prime-minister
b. *this prime-minister is former

(22) a. une ancienne église
an old church
'a former church'
b. une église ancienne
a church old
'an old church'
c. Cette église est ancienne.
this church is old
'This church is old.'

A similar case is represented by the class of subsective adjectives, such as those in (23), which give rise to the well-known intersective / non-intersective ambiguity. That is to say, when an adjective like *beautiful* is used prenominally, as in (23)a, the example can be interpreted either as 'Olga is a dancer and she is beautiful', i.e. intersectively, or as 'Olga is beautiful as a dancer' or 'Olga dances beautifully', which is a non-intersective interpretation. Such adjectives have been called subsective precisely because on their non-intersective interpretation, they license the inference that anything that is [A N] is an N, but not that it is A. Thus, (23)a on its non-intersective reading entails that Olga is a dancer (who dances beautifully) but not that she is a physically beautiful individual. Similarly, (23)b can have either a non-intersective interpretation, which is in fact the most salient one, on which it is about

someone who has been a friend for a long time, or an intersective interpretation, in which case it is about a friend who is aged.

(23) a. Olga is a beautiful dancer.
b. Peter is an old friend.

When used predicatively, the adjectives have been argued to no longer give rise to such an ambiguity; they only have an intersective interpretation.

(24) a. That dancer is beautiful.
b. That friend is old. (Larson 1998: only intersective interpretation)

Degree adjectives do in fact feature among the examples of non-intersective adjectives discussed in the literature (e.g. Siegel 1976, Larson 1988, Bouchard 1998, 2002, Demonte 2008 a.o.). In Siegel (1976), for example, examples of degree adjectives are found both among the exclusively non-intersective adjectives (e.g. *blithering*, *utter*, *inveterate* etc.), and among adjectives which have both an intersective and a non-intersective interpretation (e.g. *big*, *heavy*, *true*, *absolute* etc.); in the latter case, the degree use we are interested in here corresponds to the non-intersective use of the adjective.

The pattern presented above is not without exception. Some non-intersective adjectives can occur in predicate position under certain circumstances, namely depending on the type of noun that is used as a subject, or if the relevant 'dimension' for interpretation is made salient enough in the context.

For example, notorious intensional adjectives such as *alleged in English* and *supposé* in French, which are normally ungrammatical in predicative position, become grammatical in the predicative position when the subject is an abstract mass noun like *communism*, as pointed out by Higginbotham (1985) and Bouchard (2002). What Higginbotham and Bouchard suggest is wrong with (25)a and (26)a is that it is a category mistake. With an appropriate argument, we obtain a legitimate predication, as in (25)b and (26)b.

(25) a. *That Communist is alleged.
b. His Communism was alleged.

(26) a. *Ce communiste est supposé.
this communist is supposed
b. Son communisme est supposé.
his communism is supposed

Similar facts have been noted in connection with the distribution of relational adjectives by Demonte (1999), Picallo (2002), McNally and Boleda (2004). Such adjectives do not generally make good predicates, as shown in (27)b. However, if the right noun is used as a subject, then the predicative use of the adjective becomes grammatical, as shown in (28)b. The particular type of noun required by these adjectives is different (McNally and Boleda argue that relational adjectives denote

properties of kinds, where kinds are modelled as entities, following Carlson 1977), but the mechanism seems to be the same: as soon as the right type of argument is provided, the predicative use of the adjective becomes possible.[236]

(27) a. El Martí és arquitecte tècnic. [Catalan]
the Marti is architect technical
'Marti is a technical architect.'
b. #El Martí és tècnic.
the Marti is technical

(28) a. una malaltia pulmonar [Catalan]
a disease pulmonary
'a pulmonary disease'
b. La tuberculosi pot ser pulmonar.
the tuberculosis can be pulmonary

In sum, the pattern discussed here is similar to the pattern we have seen displayed by size adjectives on the relevant reading, in that there is a large class of adjectives which are exclusively prenominal with certain types of nouns, while some types of nouns allow their predicative use as well. Given the generality of this pattern and its general independence from degree or gradability, we conclude that the position generalization is not an argument in favour of analysing nouns such as *idiot* on a par with gradable adjectives and size adjectives as degree modifiers; it cannot be taken as (conclusive) evidence in favour of the existence of a $Deg_{N}P$. Instead, it should rather be seen as an instantiation of a pattern more generally found with non-intersective adjectives and taken to suggest that there are more general mechanisms at work which should be considered in an account of size adjectives too. We would like to propose, therefore, that the analysis in terms of abstract size suggested for case like *the mess was huge* can be extended to cases like *big idiot* once one takes into account the independent existence of particular mechanisms of semantically and syntactically combining (non-intersective) adjectives and nouns. Before discussing this in more detail, we should, however, point out that Morzycki (2009) provides another argument in favour of a distinction between the degree use of size adjectives and their abstract size reading, and of a degree(-based) account of the former, namely the "bigness generalization". It is to a discussion of these facts that we turn in the next section.

2.3 The bigness generalization

There is a second set of facts that has been used as evidence in favour of a distinction between the degree use of size adjectives and their abstract size reading, in addition to the position generalization, namely what Morzycki (2009) labels the "bigness generalization". This refers to the general impossibility of using small size adjectives to modify nouns and give rise to a low degree interpretation, that would

[236] The examples in (27)-(28) are from McNally and Boleda (2004).

be the counterpart of the high degree interpretation obtained with size adjectives that predicate 'bigness'. Consider the examples below from Morzycki (2009):

(29) a. George is a {big/ enormous/ huge/ colossal/ mammoth/ gargantuan} idiot.
b. George is a {*small/ *tiny/ *minuscule/ *microscopic/ *diminutive/ *minute} idiot.

The [A N] combinations in (29)b cannot be interpreted in terms of 'being idiotic to a low degree', in a parallel way to (29)a, which is interpreted as 'being idiotic to a high degree'. If they are acceptable, then they can only receive the concrete size interpretation, not the degree interpretation, i.e. he is both small and an idiot.[237] In sum, while adjectives that predicate bigness (i.e. upward monotonic size adjectives) systematically and productively license degree readings, adjectives that predicate smallness generally do not.

Morzycki takes the bigness generalization to only apply to degree readings of size adjectives. Therefore, examples like the following, where the adjectives predicating small size receive an interpretation that parallels the interpretation of their 'big' counterparts, in the sense that they seem to express low degree, are not treated as counterexamples:[238]

(30) a. a {small/ tiny/ minuscule/ microscopic/ diminutive/ minute} mistake
b. a small lie

This is because, on his account, these are not gradable nouns, and when size adjectives modify them they are not instances of the degree use of these adjectives, but regular size predicates that simply get an abstract interpretation due to the type of nouns. His other argument in favour of this position was that, unlike nouns like *idiot*, nouns like *mistake* fail to conform to the position generalization (cf. discussion in §2.2.2).

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[237] Note that small size adjectives may be used with a different interpretation, namely to express positive or negative evaluation, similarly to an expressive expletive like *damned* (cf. also Bolinger 1972):

(i) a. a little rascal
b. such a little fool

This use of *little* is also similar to diminutives which are used to suggest cuteness with favourable nouns – e.g. *She's a little angel, she is!*, depreciation with unfavourable ones – e.g. *you little rascal/ he's a dirty little coward* (examples from Bolinger 1972).

Note also the following contrasts in French provided by Johan Rooryck (p.c.):

(ii) a. un gros menteur [degree]
a fat liar
'a big liar'
b. un petit menteur [depreciation/negative evaluation]
a little liar
'a little liar'

(iii) a. Il est un gros menteur, vraiment le roi des menteurs.
he is a fat liar indeed the king of.the liars
'He's a big liar, the king of liars really!'
b. #Il est un petit menteur, vraiment le roi des menteurs.
he is a little liar indeed the king of.the liars

[238] The examples in (30)a are from Morzycki (2009).

In what follows we will show how Morzycki accounts for the bigness generalization within a degree-based analysis and what the predictions and problematic aspects of this approach are. Importantly, the predicted correlation between the position generalization and the bigness generalization will be shown not to hold; hence such facts cannot be taken to directly support the particular account proposed by Morzycki. We will suggest an alternative way of approaching the facts which takes the bigness generalization to be an instantiation of a more general property of the nouns for which it holds, namely the lack of meaning neutralization.

Morzycki (2009) takes the bigness generalization to define the degree use of size adjectives, in an absolute way, along with the position generalization discussed in §2.2.1, and to support his particular degree-based analysis of gradable nouns and size adjectives. On his account the restrictions on the available types of degree modification by means of size adjectives are brought about in part by the underlying syntax that is proposed and in part by how the scale structure of the size adjective interacts with the semantics of degree measurement. Only *big*-type adjectives will be able to occur in the particular configuration in which they can modify gradable nouns as only they will make a difference to the positive unmodified noun (where *pos* is used). Let us see how this comes about.

Recall from the discussion in §2.2.1 that on Morzycki's account gradable nouns like idiot are taken to be of semantic type $\langle e,d \rangle$ and to project a Deg_NP in the syntax. Syntactically, size adjectives are analysed as specifiers of Deg_NP. Semantically, they are analysed roughly on a par with ad-adjectival measure phrases because "both measure phrases and size adjectives predicate of a degree that it has a certain minimum size". Pursuing the parallel with the adjectival domain, he proposes that they are introduced by a nominal counterpart of the *Meas*-head assumed by Svenonius and Kennedy (2006) for AP-modifying measure phrases. Some complications arise here, however: while AP-modifying measure phrases do not give rise to an entailment to the positive form of the adjective, i.e. they receive a neutral interpretation, as shown in (31), size adjective do imply that 'x is N', i.e. the non-neutral or standard-related interpretation is preserved, as shown in (32).

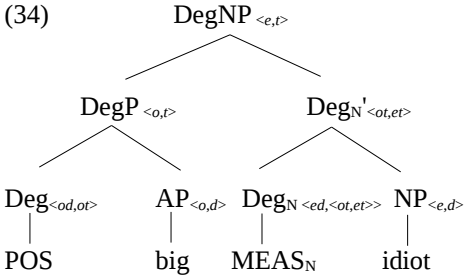
(31) a. He's 1.50m tall.
b. He's tall.

(32) a. He's a big idiot. →
b. He's an idiot.

This leads him to assume that the nominal *Meas*-head responsible for introducing size adjectives not only introduces the minimum requirement, but also the standard, just like *pos*. Thus, $Meas_N$ requires that the individual satisfy the gradable predicate (noun) to a degree that (i) is at least as great as the smallest degree that satisfies the size adjective, or rather the DegP projected by the size adjective, and (ii) is at least as great as the standard for the gradable noun. The denotation of $Meas_N$ is given in (33) and the corresponding syntactic structure is repeated in (34):

(33) $[[Meas_N]] = \lambda G \lambda M \lambda x\ [\text{MIN}\{d : d \in \text{SCALE}(G) \wedge M(d)\} \leq G(x) \wedge sG \leq G(x)]$
(where M is a measure phrase consisting of a size adjective, SCALE(G) is the scale (ordered set of degrees) associated with a particular gradable noun G, and MIN picks out the smallest degree on that scale that satisfies M)

(34)



Let us now see how he excludes *small*-type adjectives. If *small* is used instead of *big*, this will amount to requiring that (i) the degree of that individual's idiocy be at least as great as the smallest that meets the smallness standard and that (ii) the individual meet the standard for idiocy. It is in computing the minimum (i.e. the first requirement) that a problem arises. Morzycki states the problem as follows. There is a minimum degree on the idiocy scale: d_0, corresponding to 'not idiotic at all'. There can be no smaller degree than this, so this will be the maximum on the smallness scale. Thus, irrespective of what the standard for smallness is, it will always be the case that d_0 is small enough to meet it. Therefore, the minimum computed for small idiot will always be the same: d_0.[239] But to say that the individual's idiocy must meet or exceed d_0 is to say nothing at all. Since d_0 is the minimum of the idiocy scale, every degree of idiocy meets or exceeds it. That means that the requirement will always be trivially satisfied.[240] And all that remains of the denotation is its second part, namely that the individual must meet the standard for idiocy. But this is the same denotation that would have been arrived at without the adjective, with [*pos* N]. So modification by small-size adjectives on a degree interpretation will be blocked.[241]

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[239] Morzycki's (2009) treatment of d_0 as being the maximum on the smallness scale and, therefore, always meeting the standard for smallness wherever it may be fixed, is not unproblematic. The adjective *small*, just like other negative dimensional adjectives such as *short*, *shallow* etc., normally requires/ presupposes that the objects measured *have some* of the respective property or dimension, for example a general physical extension, or some, non-zero height or length in the case of *short*, or some depth in the case of *shallow* (cf. Bierwisch 1989, Kennedy and McNally 2005). Such adjectives will not apply to objects that have no (i.e. zero) physical extension, no height/ length or no depth. Similarly, a size of zero means not having a size, so it cannot be included on any linguistic scale that measures size. They may have a lower-closed scale conceptually, but they cannot reach the zero point due to this presupposition. In a parallel way, then, we would not expect the standard of smallness to be met by d_0. In addition, even if we accept the relevance of d_0 (and even try to accommodate that it represents a value that is not an actual zero), it is not quite clear that this degree, which is the maximum on the scale of smallness, will be the minimum degree that satisfies the standard for smallness.

[240] At this point his choice to treat size adjectives as measure phrases introduced by a dedicated *Meas*-Deg-head which introduces this minimum requirement becomes crucial.

[241] See de Vries (2010) for a different analysis, also framed in a degree-based approach, but defining gradable nouns as being of type $<d,<e,t>>$ and deriving the impossibility of using small size adjectives

On this account, therefore, the explanation of the bigness generalization rests on rather particular and not unproblematic assumptions about the semantic and syntactic make-up postulated for the [A N] combination. But even putting aside such considerations, the analysis cannot be sustained: the predicted correlation between the bigness generalization and the position generalization, which are supposed to define the degree use of size adjectives and distinguish it from their abstract size reading, is empirically contradicted.

On the one hand, there are cases for which the position generalization does not hold, as illustrated again in (36), and which would be excluded from the domain of gradability by Morzycki, but which also show resistance to modification by small size adjectives, as illustrated in (35):[242]

(35) a. un {grand/ *petit} courage [French]
a big/ small courage
b. a {huge/ *small} mess [English]

(36) a. Son courage était grand. [French]
his courage was big
b. The mess they left behind was huge. [English]

On the other hand, there are also cases which conform to the position generalization, as shown by the unavailability of the relevant reading in (38), and which are taken by Morzycki to be gradable nouns and to allow the degree use of size adjectives, but for which the bigness generalization does not seem to hold:[243,244]

(37) a. un {grand/ petit} mangeur [French]
a big/ small eater
b. a {big/ small} stamp-collector [English]

(38) a. Ce mangeur est {grand/ petit}. [French]
this eater is big/ small
b. That stamp-collector is {big/ small}. [English]

from the monotonicity properties of positive vs. negative adjectives and their interaction with the gradable structure of the nouns.

[242] cf. Van den Velde (1996) for this observation in connection with abstract mass nouns denoting properties.

[243] In addition, as Morzycki (2005) notes, adjectives predicating small size seem to be better in the comparative and superlative, i.e. the contrasts seem less clear, though he points out that the effect does not go away completely:

(i) a. Floyd is a {bigger/ ?smaller} idiot than Clyde is.
b. Floyd is the {biggest/ ?smallest} idiot I know.

[244] Here are some attested French and English examples:

(i) a. Les différenciations individuelles vont apparaître à travers les comportements alimentaires (certaines personnes mangent plus ou moins vite), les prises alimentaires (gros mangeurs, petits mangeurs) et la perception des odeurs et des saveurs. (http://www.inpes.sante.fr/OIES/alimentation_atoutprix/pdf/05manger.pdf)
'Individual differences will show up in eating behaviour (certain people eat more or less quickly), the intake of food (big eaters, small eaters) and the perception of smells and tastes.'
b. "She didn't eat very much supper, he said. I don't think she did." […] "Oh, she ate enough. She's just a small eater." (Corpus of Contemporary American English)

This shows that the bigness generalization does not characterize in an absolute way those cases that Morzycki would take to be instances of the degree use of the adjective and of gradable nouns, while also holding for nouns and adjectives that he excludes from the realm of gradability. In other words, there is no complete correlation between the bigness generalization and the position generalization. As such, these facts cannot be taken as evidence in favour of distinguishing between the degree use of size adjectives and their abstract size reading and as support for the particular degree-based analysis he proposes. In addition, these facts also correlate with another observation, namely that the nouns which resist modification be *small* can never really be neutralized.

Nouns that obey the bigness generalization, do so systematically: neutral readings do not occur in any context. For example, when the noun is used inside comparative or interrogative constructions like *He is a bigger idiot than his brother* or *How much of an idiot is he?*, it still entails that *He is an idiot*. In other words, it seems that this high degree, or standard-related, meaning is always part of the meaning of the noun and cannot be removed. This suggests that it should be made part of the lexical meaning of these nouns, rather than being 'detached' and placed in the syntax, as in Morzycki's (2009) degree-based account, where it is taken to be a fact about the internal semantics of the extended nominal projection (as it is made part of a particular type of operator, *Meas*, that occupies the head of $Deg_N P$). We suggest instead that this should be taken to be a fact about the lexical semantics of the nouns. As a general principle, if a meaning is entailed in all the uses of an item, then it is part of its lexical meaning (cf. Rappaport-Hovav 2008, Rappaport-Hovav and Levin 2010).

Thus, idiots are individuals characterized by a high degree of idiocy, i.e. individuals whose idiocy is big[245]. Individuals whose idiocy is small will not qualify as idiots. Translating it in terms of scales, this means that, even though in theory an idiocy scale may be conceived of that starts at an absolute 0, i.e. at the point corresponding to 'not idiotic at all' or 'no idiocy at all', it does not seem that this is also the linguistically relevant scale for *idiot* (contrary to what Morzycki 2009 assumes): the domain of the noun *idiot* seems to include only individuals that have some idiocy to start with. It should also be noted that not all nouns are alike. For example, while nouns which categorize [+human] individuals based on a gradable property like *idiot* seem to presuppose that the individuals have quite a high degree of the property, other nouns, especially those derived from activity verbs, are more neutral.[246] Among abstract mass nouns there is also variation. Nouns referring to physical dimensions (e.g. *length*, *height*) are neutral. But there are also others which are derived from adjectives and seem to be based on the non-neutral, or standard-related, meaning of the adjective (e.g. *tallness*). These, however, do not seem to be

[245] As will become clearer in §2.4, we understand "idiocy" here as referring to an instance of a property or trope (cf. Moltmann 2004a,b, Nicolas 2004, 2010). Tropes are a sort of individuals, but they are dependent individuals (cf. *Mary's idiocy*, *John's happiness* etc.) (see Moltmann 2003, 2004a,b, 2007, 2009, 2011 for properties of tropes). As compared to concrete objects like chairs or boys that have concrete physical size, tropes have abstract size. The use of the term 'degree' in our description of the meaning of nouns in this paragraph should, therefore, not be taken literally, i.e. in the sense it is generally understood in the literature assuming a degree-based approach to gradable adjectives, which is also the sense in which it is understood in Morzycki (2009) (cf. also chapter 1 for more discussion).

[246] These results will be confirmed by the data discussed in section 4.

gradable (e.g. ??*big[ger] tallness*, and even: ??*more tallness*). Among 'evaluative' abstract mass nouns there is also some variation – cp. *courage* in (35) to *comfort*, which may be modified by *small* (e.g. *It was small comfort to know that we were being backed by that group.* – Bolinger 1972). There is also variation among nouns denoting abstract objects characterized by a property – cp. *mess*, *blunder* and *mistake*, *problem*.[247]

This variation in encoding what might be called a standard-related interpretation,[248] and the persistence of this sort of interpretation throughout the uses of certain nouns, is most easily relegated to the lexicon. It is not clear how a *pos*-based approach, which 'externalizes' the standard and places it in the syntax, could capture these facts straightforwardly. On the one hand, it seems to replicate in the syntax information which is already lexically encoded. On the other hand, it would require further complicating the semantics of all potential adnominal degree expressions in a way that would lose the parallel with degree modification in the adjectival domain (cf. the case of *Meas* above).[249] Placing this aspect of the interpretation of gradable nouns in their lexical semantics, the way a degree-less approach would, seems to capture the facts better and to offer a simpler account.

To conclude, the bigness generalization cannot be taken as an argument in favour of distinguishing between the degree use of size adjectives and their abstract size reading or as evidence in favour of adopting a degree-based account which treats nouns like *idiot*, but not *blunder*, semantically on a par with gradable adjectives, and assumes the existence of a $Deg_N P$. This means that the suggestion made in §2.2.2-2.2.3 that the analysis in terms of abstract size could be extended to all cases (i.e. to *big idiot* as well) can be maintained. This view will be detailed in the next section.

2.4 Size adjectives are always size adjectives

The facts discussed so far concerning the distribution and interpretation of size adjectives do not support an analysis as degree expressions. It was shown (cf. §2.2.3) that size adjectives pattern with non-intersective adjectives more generally.

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[247] (Certain) gradable nouns seem to be somewhat similar to partial adjectives in that they require some minimal amount of the property (as compared to dimensional abstract nouns which start applying from an absolute zero), but they may differ in the size of this interval/ amount: for some it may need to be very high – e.g. *idiot*, *mess*.

[248] If we were to think in terms of (types of) scales and standards (cf. Rotstein and Winter 2004, Kennedy and McNally 2005), we could say that with nouns the "standard" may not only coincide with the maximum or minimum of a scale or be calculated with respect to a norm, but there seems to be a lot more variation.

See Kennedy (2007a) for a proposal of how to relate the type of standard and the type of scale (which accounts for the differences between relative and absolute adjectives), and McNally (2011) for some criticism, and a different proposal which relies on the types of properties adjectives denote and the strategies for calculating whether they apply or not; the latter seems better suited to account for example for those cases where adjectives have absolute standards which do not coincide with the maximum or minimum of the scale.

We will, however, not pursue a description of gradable nouns in these terms here.

[249] But see Bierwisch (1989) for a type of degree-based approach designed specifically to account for the differences between dimensional and evaluative adjectives, including the difference concerning the way in which they relate to a standard.

The alternative account we have suggested is to take size adjectives as simply being size adjectives and to re-analyse all cases of the so-called 'degree' use as instances of an abstract size interpretation. Their sometimes peculiar way of combining with nouns can be understood as making use of mechanisms generally available to non-intersective modification. In §2.4.1 we will present the alternative approach to size adjectives. In order to account for the exclusively attributive uses, we need a more general theory of non-intersective adjectives. This is why in §2.4.2 we will provide some background on possible approaches to non-intersective adjectival modification, which will serve to suggest possible directions one could take in order to account for size adjectives too, though the choice of the exact mechanism to will be mostly left open for future research to settle.

2.4.1 Abstract size

On the view we would like to put forth, the apparent degree reading of size adjectives is always simply an abstract size reading (cf. discussion in §2.2.2). In these uses, the adjective still measures size, but in this case it is the size of instances of properties rather than that of objects that have concrete spatial dimensions; hence, the abstract nature of the measuring involved. Let us first consider the predicative uses which have been the first ones to be dealt with in this way. In predicate position, the relevant interpretation will arise when the subject is an object of the right sort, for example an abstract mass noun like *patience*, *generosity* etc. We take such nouns to denote instances of properties (cf. Moltmann 2004a,b, Nicolas 2004, 2010).[250] When an expression is used whereby their size or volume is to be measured, that will be understood in terms of the degree to which the property holds. Similar effects are also found with other adjectives too, as illustrated below:[251]

(39) a. His patience is sufficient for this job.
b. The safety of the roads in the Czech Republic is satisfactory.
c. The length of this board is {satisfactory/ sufficient}.

Nicolas (2010) discusses such effects on the interpretation of abstract mass nouns while maintaining that they still basically denote instances of properties. Consider the following example from Nicolas (2010):

(40) Julie's love for Tom was greater than her love for Fred.

Nicolas argues that sentences like (40) compare two instances of love using an ordering relation associated with the adjective *great*. Given the vague meaning of

[250] The view of abstract mass nouns that we are adopting here is also compatible with Chierchia's (1984) theory. He analyses nominalizations like *goodness* (e.g. *Goodness is good*) as entity correlates of properties, a sort within type <*e*>, similar to Carlson's (1977) kinds. As has already been pointed out, however, the relevant readings of size adjectives occur in the context where the nominal does not have a kind reading, but refers to an instance of a property, i.e. a particular of an entity correlate of a property (just as an "ordinary" individual/ object is a particular of the kind) – recall the contrast illustrated earlier: *#Generosity is enormous* vs. *Mary's generosity was enormous*.

[251] The examples in (39) are from Constantinescu and Součková (2007).

great, this may then be understood as comparing the two instances of love using an ordering relation associated with the noun *love* and the verb *to love*. Hence the possibility of a paraphrase in terms of degree: 'the degree to which Julie loved Tom was greater than the degree to which she loved Fred'. (p. 16) In other words, the basic denotation of these nouns need not be, and is not, actually defined in terms of degrees (contra Tovena 2001, for example). What the paraphrase in terms of degree reflects is just one among several possible ways of understanding the application of certain modifiers or predicates to instances of properties.[252]

This sort of interpretation will not, however, be available when the DP subject of the adjectival predicate denotes a [+human] individual (e.g. *that idiot*). In such cases, the interpretation will be in terms of physical size – this is the only interpretation that makes sense when applying a size adjective to an individual. This accounts for the unacceptable examples in (13)a-b, which contrast with those in (17)-(18), as well as for the non-contradictory examples in (20), which contrast with (19).[253]

When used prenominally with these nouns, the adjectives can be interpreted in a similar way to the cases where they modify property-denoting nouns. The difference is that here the property with respect to which they are interpreted is part of the internal semantic make-up of the noun (e.g. *idiocy* in the case of *idiot*). As far as we can tell, with property-denoting nouns, the adjective could apply in either of two ways, without that having a visible effect on the interpretation. Note again that with such nouns the interpretation obtained in the attributive and predicative uses of the adjective will not be distinguishable, hence the contradictory statements in (19).

The generalization of this account in terms of abstract size is also best supported by the distribution of size adjectives – in particular by the facts related to figurative meanings that were pointed out in §2.1. It was shown that size adjectives cannot generally be used to modify nouns used with figurative interpretations, though there also seem to be some counterexamples. Two relevant examples are repeated below for convenience.

(41) a. #Julie is a big boy.
b. He is just a big baby.

It was suggested there that the relevant interpretation of *baby* may have lexicalized into a gradable noun of the *idiot*-type. Here is how we may now understand the difference between nouns like *boy* and nouns like *baby*. On the one hand, as argued in chapter 3, on their stereotypical, figurative interpretation, nouns like *boy* denote sets of various properties that are stereotypically associated with boys. (Some of) these may intersect, and they make up an unordered set. In order to qualify as Ns, in this sense of N, individuals must have one or more such stereotypical properties. In general, they have a relatively large number of them. But sometimes having just one

[252] See also section 3 where a different type of interpretation of abstract mass nouns will show up (namely as facts).

[253] This type of interpretation will also be available when the adjective is used attributively with these nouns (i.e. *idiot*), which leads to an ambiguity in these cases, an ambiguity which does not arise with e.g. property-denoting nouns.

such property, if it is a very salient one, may be sufficient.[254] This is not unexpected given that the stereotypicality of the properties may vary in the sense that they are more or less important in deciding whether a given individual is, figuratively speaking, an N or not. On the other hand, we would like to suggest that nouns like *baby*, have lexicalized as nouns of the *idiot*-type, in the following sense. They probably originally had a figurative interpretation of the type discussed above, but subsequently the set of stereotypical properties has been 'collapsed' and has come to be lexically encoded as one property, though a possibly complex, multi-dimensional one, such as 'immaturity'. In other words, *baby* has undergone a lexical change and is not represented as a set of individuals that all have a number of stereotypical properties of babies, but rather as a set of individuals characterized by their immaturity, similarly to a noun like *idiot*, which denotes a set of individuals characterized by their idiocy. This makes it possible to use a size adjective, as it can now apply to this one characterizing property inside the meaning of the noun.

We would like to point out again that talking about the degree of a property in these cases is just a convenient paraphrase. This is understandable given that the meaning introduced by size adjectives in these contexts is very similar to meanings obtained by degree modification in the adjectival domain. However, the mechanism by which these meanings are obtained is different. We have argued that in all the relevant cases the size adjective applies to an instance of a property or trope. These are objects (i.e. we take them to be of type <*e*>) of a particular sort. Among the properties that distinguish tropes from other sorts of objects, we mention here the fact that they are dependent (i.e. they depend on another individual in which they are located – e.g. *Mary's happiness*, cf. Van de Velde 1996, Moltmann 2004 a,b, 2011) and that they have abstract size (for more details on tropes, see Moltmann 2003, 2004a,b, 2007, 2009, 2011). Gradable nouns, therefore, are those nouns that either denote sets of such abstract objects, which have an abstract size (e.g. *idiocy*, *courage* etc., i.e. nouns that denote properties, whose instances have abstract size), or that denote sets of [+/-human] individuals defined in terms of such an object (e.g. *idiot*, a noun that denotes a set of individuals characterized by their idiocy). It should be noted, however, that size is not an inherent ordering criterion for nouns: abstract size is not one for the gradable nouns discussed here (e.g. *idiocy*, *courage* etc., *blunder*, *problem* etc., *idiot*, *smoker* etc.), just as concrete size is not for concrete nouns like *boy* or *house*. It may come to be a possible ordering criterion, once an explicit modifier is added (e.g. *big idiot*, *huge problem*, *great courage* etc.. just like *tall boy*, *big house* etc.). This makes an ordering, hence comparison, possible – as in example (40) from Nicolas (2010) discussed earlier.

The mechanism by which, in their attributive use, size adjectives can access a property inside the lexical meaning of nouns like *idiot*, is one that is independently needed in the construal of other non-intersective adjectives, as discussed in §2.2.3., and may be formally implemented in several ways. This is something that requires an independent, generalized account. However, offering a theory of non-intersectivity would go well beyond the scope of this thesis. In the next sub-section,

[254] It is, probably, this possibility of singling out just one property of the set (which was seen happening in the context of internal *such* with result clauses or in exclamatives) that places these nouns somewhere in between ordinary, non-gradable nouns and nouns like *idiot*, which encode one salient proeprty in their meaning (and which are generally considered to be gradable).

we will only briefly suggest some possible directions given the existing proposals in the literature on non-intersective adjectives that will be reviewed in the first part of the sub-section.

2.4.2 Non-intersective uses of abstract size adjectives

In this section we will consider some possible ways of approaching the exclusively attributive uses of size adjectives (e.g. *a big idiot*) where they target a property inside the meaning of the noun. In order to do this, we will first review some of the main existing accounts of non-intersective adjectives, and the differences between intersective and non-intersective adjectives.

There are several types of approaches in the literature. Some assign two different semantic (and syntactic) types to intersective and non-intersective adjectives (such as Siegel 1976). Others argue that the different behaviour is actually due to there being different semantic types of nouns and, accordingly, extend the argument structure of the noun in order to account for the different types of interpretations adjectives give rise to in combination with (certain types of) nouns (Larson 1998). Finally, there are accounts which posit richer lexical structures for nouns (Pustejovsky 1995, McNally 2006, as well as Bouchard 1998, 2002).

Probably the best known analysis of the intersective/ non-intersective ambiguity illustrated in (23) above and repeated below for ease of reference, is Siegel's (1976) doublet analysis of adjectives.

(42) a. Olga is a beautiful dancer.
b. Peter is an old friend.

Siegel proposes that the ambiguity reflects a fundamental semantic and syntactic dichotomy holding among adjectives. One class is that of non-intersective adjectives (or non-intersectively interpreted adjectives). These are analysed as underlyingly nominal modifiers, which combine with common nouns to form new common nouns. Semantically, they are properties of properties, rather than properties of individuals (i.e. predicate modifiers), so they are of type $\langle\langle e,t\rangle,\langle e,t\rangle\rangle$, and combine with the noun as function to argument. This means that they combine with characteristic functions of sets to form new characteristic functions; in other words, they combine with a property to form a new, modified property (hence, they are reference-modifying in Bolinger's 1967 terminology). In the usual Montagovian way, they invoke intensions (hence the term 'intensional adjectives'). The second class is that of intersective adjectives. Semantically, intersective adjectives are of type $\langle e,t\rangle$ (i.e. simply characteristic functions) and are extensional (or referent-modifying in Bolinger's 1967 terms).[255] When they combine with a noun, the semantic result is predicate conjunction, which can be expressed through λ-abstraction. Their attributive use is accounted for through a mechanism of relative clause reduction (for details, see Siegel 1976).

[255] More precisely, taking into account intensions, non-intersective adjectives are of type $\langle\langle s,\langle\langle s,e\rangle,t\rangle\rangle,\langle\langle s,e\rangle,t\rangle\rangle$, and intersective ones of type $\langle\langle s,e\rangle,t\rangle$.

While some adjectives are assigned exclusively to one of these two classes (e.g. *aged* is only intersective, *former* – always intensional), a large number of items are assumed to belong to both, which is the source of the intersective / non-intersective ambiguity. For Siegel this is a case of homophony between two semantically distinct elements. Thus, a single phonetic form like *old* or *beautiful* actually corresponds to a "doublet" old_1/ old_2 or $beautiful_1$/ $beautiful_2$, respectively, and this yields ambiguity. Adjectives like *big* are also such cases: they are treated as ambiguous between a non-intersective use (i.e. the degree use) and an intersective one (i.e. the interpretation descriptive of size). The degree-less approach to size adjectives (cf. discussion in §2.2.1), which amounts to proposing a distinction between the degree adjective *big*, which is analysed as a degree function (hence, a predicate modifier), and the predicative size adjective *big*, is, therefore, directly comparable to Siegel's analysis of adjectives.

Although this type of analysis can account, for example, for the entailment facts (i.e. that on the non-intersective interpretation [A N] fails to entail that 'NP is A'), it also faces certain problems. First, as Larson (1998) points out, this approach postulates an ambiguity for a lot of adjectives, which is difficult to justify. Secondly, as McNally and Boleda (2004) and Partee (2010, in press) observe, the predicate modifier analysis also makes it hard to explain why the putatively non-intersective reading is sometimes available even when the adjective is used predicatively, and, hence, is applied to something of type $<e>$. Such behaviour is even exhibited by privative adjectives like *fake* (as in *That gun is fake*), as well as other intensional adjectives like *alleged* (recall the examples in (25)-(26) in §2.2.3).

Differently from Siegel (1976), Larson (1998) proposes that the intersective/ non-intersective ambiguity should not be blamed on the adjective, but on the noun. He suggests that the ambiguity involves what the adjective is modifying (e.g. the individual or the dancing) rather than something in the lexical semantics of the adjective itself. Thus, he argues for treating adjectives, including the subsective ones, uniformly as type $<e,t>$, and proposes that some nouns have an event argument *e* which can be modified directly by the adjective, just as its standard entity argument usually is.[256] The two readings of an adjective like *beautiful* in *a beautiful dancer* in (23)/(42) above are thus correlated with whether the adjective modifies the noun's entity or event argument. In addition, he proposes that the event argument can be bound by a (generic) quantifier by the end of the derivation (see Larson 1998 for details). In the same vein, McNally and Boleda (2004) propose re-analysing relational adjectives intersectively, as properties of kinds: they posit that all common nouns have an implicit kind argument, which is related to the individual-sort argument typically associated with nouns via the Carlsonian realization relation R (cf. Carlson 1977). The effect of modification by a relational adjective is to restrict the kind described by the modified noun to one of its sub-kinds. Subsequently, the kind argument gets saturated by a contextually-determined kind. Thus, a noun phrase like *arquitecte tècnic* 'technical architect' in (27) ends up denoting a property of individuals which can then be applied to an argument like *Martí*.

[256] Larson (1998) takes the nominal *dancer* to apply to pairs of individuals $<x,e>$ such that *x* is the agent of *e*, where *e* is a dancing event.

Such approaches predict the difficulty of using these adjectives predicatively (on the relevant interpretation, where the adjective has more than one) and present it as a matter of sortal mismatch, i.e. if the subject of the copular sentence does not denote an object of the right sort, the adjective cannot be used predicatively. However, if the argument of the adjective is of the right sort (e.g. if the subject of a relational adjective does plausibly denote a kind), then the predication will be acceptable, as in (28)b. Therefore, this type of approach seems better suited to also capture the possible predicative uses of such adjectives.

However, this sort of approach, which moves to an intersective semantics for at least some of the non-intersective adjectives, entails providing a much more fine-grained semantics for nouns. As McNally and Boleda (2004) note, such analyses result in a very extended argument structure for nouns. This proliferation of arguments also brings about a consequent proliferation of covert operations that are required to properly bind those arguments in the absence of overt expressions that have this function, such as the covert generic operator postulated by Larson (1998) to bind a noun's event argument.[257,258] McNally and Boleda (2004) and McNally (2006) suggest that once argument lists get too long, an alternative, more highly structured representation, such as that proposed by Pustejovsky (1995),[259] starts to look more appealing as it allows us to distinguish those variables which have syntactic consequences from those which do not (i.e. those which license discourse referents from those which generally do not).

An alternative approach is proposed by Bouchard (1998, 2002). Bouchard argues that the semantic part of the entry of a common N (e.g. *mammal*) is a network of interacting elements (or functions): (i) a characteristic function *f* which provides the property that interprets the N;[260] (ii) a specification for a time interval *i*, which tells us at what moment *f* holds; (iii) an indication of the possible world *w* which allows us to know whether *f* holds in the "actual" world or in some other imagined world in which *f* is not necessarily false; and (iv) a variable assignment function *g*, that allows us to determine the truth value of the final formula by associating each variable with a particular entity in the model. On this account, the combination of an adjective and an N actually always results in an intersective interpretation. The difference between the traditional intersective and non-intersective (interpretations

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[257] McNally (2010) also points out that it is not clear what kind of event the event-argument of nouns in Larson's analysis stands for – e.g. *dancer* vs. *cup, recipe* etc. As for McNally and Boleda's analysis, she notes that it uses an ad hoc composition rule, but one that could be generalized to diverse cases of modification.

[258] Note that the same criticism can be extended to degree-based approaches to nominal gradability, i.e. approaches which postulate explicit degree arguments in the semantics of gradable nouns (which are defined either as of type $<d,<e,t>>$ as in Matushansky 2002b, or of type $<e,d>$ as in Morzycki 2009) and which, consequently, have to postulate a covert operator, *pos*, that will bind the degree argument of a gradable noun, or to turn the measure function into a predicate, in the absence of overt degree expressions in order to. This a possibly undesirable consequence.

[259] We will not discuss Pustejovsky's (1995) Generative Lexicon theory here, as it would require entering a completely different framework that we will not make use of in the rest of this chapter. We refer the interested reader to Pustejovsky (1995 and subsequent work), as well as to McNally (2006), Saint-Dizier (2001) etc. for more discussion on criticisms of GL and possible ways of countering them, and Asher (2007) for an alternative theory.

[260] Bouchard defines this, following Kamp and Partee (1995), as "a measure of the degree to which an object falls in the extension of a given concept".

of) adjectives is recast in the following terms. In some cases, the meaning of the adjective intersects with the whole network of the meaning components of the N; this is the traditional intersective interpretation. In other, specifically determined cases, the adjective intersects with only one of these components in particular; this is the case of the traditional non-intersective adjectives.[261] In French (and other Romance languages) this correlates with the prenominal use of the adjective; when in postnominal or predicative position, the adjective cannot access these internal subparts of N, but can only modify the N as a whole. What modification relation can be defined crucially depends on the meaning of the adjective (i.e. what kind of feature it can modify), and the meaning of the N (i.e. what features it has).[262] For example, a temporal adjective like *future* or *former* (e.g. *the future president* or *former senator*) is compatible with the interval of time *i* (and results in the interpretation 'someone characterized as a president/ senator at an interval of time in the future/ past); *false* (e.g. *a false eyelash*) is compatible with the possible world *w*; *alleged* (e.g. *an alleged communist*) with the value assignment function, and an adjective like *perfect* (e.g. *a perfect scoundrel*) with the characteristic function *f*. When a noun phrase built from the same adjective and the same N can receive more than one interpretation, it is because the adjective is in a position to combine with different components of N.

This approach seems to offer an elegant and quite straightforward way to capture non-intersective (uses of) adjectives. However, it is not completely clear how to formally represent these meaning components and their interaction with modifiers, nor is it always obvious which meaning component is modified by a given adjective.

To conclude, the theories on non-intersective adjectives discussed in this section have in common the search for ways to capture the intuition that non-intersective adjectives modify something inside the meaning of the noun. They differ significantly in the chosen formalization of the mechanisms whereby the adjective can target such a meaning component, though, even in this respect, we have seen that two main directions exist: either to treat non-intersective adjectives differently from intersective ones and take them to act as functions on the nouns they combine with, or to treat adjectives uniformly and enrich the structure of the noun, elements of which non-intersective adjectives can be predicated of. With this much background information, we may now consider some possible directions to take in order to account for the behaviour of size adjectives.

Our understanding of size adjectives probably resonates most obviously with the type of approach proposed by Bouchard (1998, 2002) to account for non-intersective adjectives. On this approach the prenominal adjective is in a position to target an internal element in the semantic make-up of a noun. A size adjective on its degree reading would target the characteristic function *f* which provides the property that

[261] His theory allows an adjective to modify only a subpart of N, but, differently from e.g. Pustejovsky 1995, he does not allow modification of elements internal to the characteristic function *f* providing the property that interpretes N, but only modification of N itself, as well as *i, w, g*. "These are not context-dependent notions like qualia, but general, nondefeasible subparts that all nouns have". In this way, he "avoids the problem of multiple polysemy created by the defeasibility of the qualia structures and sublexical semantic features" (Bouchard 2002).

[262] There is some unclarity on this point. While at first Bouchard argues that the four components are present in the lexical semantics of all nouns, he later on suggests that nouns may actually differ in their actual semantic make-up.

interprets the N – e.g. *idiocy* in the case of *idiot*. This is in fact how Bouchard himself analyses examples such as *a big eater*, as illustrated in (43) for French:

(43) a. un {mangeur/ fumeur/ buveur} gros
a eater/ smoker/ drinker fat
'a fat eater/ smoker/ drinker'
b. un gros {mangeur/ fumeur/ buveur}
a fat eater/ smoker/ drinker
'a {big/ heavy} {eater/ smoker/ drinker}'

According to Bouchard, the basic meaning of *gros* is 'surpasses the norm in volume'. In (43)a, the adjective modifies the whole network of the N, and indicates that the individuals denoted surpass the norm in volume, size being the most salient feature of volume. By contrast, in (43)b the adjective only intersects with the characteristic function of the N, and, therefore, says that the norm in volume is surpassed qua eater, smoker or drinker. By inference, then, it is interpreted with respect to food, smoking and drinking, respectively.

The view of size adjectives we have proposed here may also be implemented in a Larsonian type of semantics, whereby the adjective would be predicated of an (implicit) argument of the noun.[263] This argument would be an instance of a property that defines an individual as N – e.g. *idiocy* in the case of *idiot*. When applied to it, the size adjective would give rise to the same interpretation as in examples like *huge stupidity/ his stupidity was huge*. This sort of argument would then be somewhat similar to the content of the characteristic function *f* from Bouchard's theory as well as to that of the 'attribute' given by the N in Higginbotham (1985).

It is important to point out (again) that, although the meaning introduced by size adjectives in these contexts is very similar to meanings obtained by degree modification in the adjectival domain, the mechanism by which these meanings are obtained is different. In those approaches to gradability that make use of degrees, the semantics of adjectives is basically defined in terms of a comparison of degrees. Take, for example, the *pos*-operator that is generally postulated for the positive, unmodified form of adjectives and which is responsible for introducing the non-neutral interpretation. The positive form of an adjective like *tall* will be interpreted

[263] Larson (1998) in fact raises the question whether the same type of analysis that he proposes to account for event-modifying adjectives (e.g. *beautiful dancer* or *former president*) could be applied to account for adjectives such as *utter* or *complete* (as in *an utter/ complete fool*) etc. He notes that these adjectives are also behaving "adverbially", but the semantics is not event modification, but rather degree modification, as the relation between the adjective and the noun parallels that between a degree modifier and an adjective. He leaves open the question of how precisely to accommodate these forms, simply speculating that "just as we must posit a hidden event parameter in *dancer* to accommodate *beautiful dancer*, we may ultimately be forced to posit a hidden degree parameter in *fool* to accommodate *utter fool*." (Larson 1998:10). The way he talks about it suggests that this argument would indeed be similar to the sort of degree argument defined in degree-based approaches to gradable adjectives. In a sense, then, this anticipates the extension of degree-based approaches to gradable nouns, as proposed by Matushansky (2002b), Matushansky and Spector (2005), and, most explicitly, Morzycki (2009). These analyses propose to define gradable nouns in terms of explicit degree arguments, i.e. either of type <*d*,<*e*,*t*>> or of type <*e*,*d*>. However, as discussed throughout this section, such an account cannot be applied to size adjectives, which involve something different from degree modification as we know it from the adjectival domain. As for adjectives like *complete*, we will examine them in §4.5.2.

roughly as being 'tall to a degree *d* which is greater than or equal to the standard degree' (see also chapter 1, §1.1). Nothing like this (i.e. comparison of degrees) is involved in the case of modification by size adjectives. In all the relevant cases the size adjective is predicated of an instance of a property or trope, i.e. an object of type <*e*>, which is part of the meaning of the noun, and results in a size reading, as usual – it is just abstract due to the particular nature of the object involved. This is completely parallel to how a non-intersective adjective like *old* in *an old friend* is interpreted as applying to the property defining the N, namely the 'friendship', and measuring the length of the friendship in time. Once an explicit modifier like *big* or *old* is introduced, this makes an ordering, hence comparison (of idiots and friends, respectively), also possible (recall also example (40) from Nicolas (2010) discussed in the preceding sub-section).

More work is needed to decide on the best analysis of the non-intersective uses, but this is an issue for a more general theory of non-intersective adjectives. Be that as it may, it seems that this type of approach, which capitalizes on differences among nouns while treating size adjectives in the same way in all cases, offers a simpler account, as well as making use of mechanisms that would be independently needed.

2.5 Concluding remarks

The facts examined in this section concerning the distribution and interpretation of size adjectives do not seem to support an analysis as degree modifiers, semantically or syntactically. Instead, they seem to favour an analysis which treats them as size adjectives across the board and attributes the apparent degree reading to an abstract size interpretation which arises when the adjective meaning applies to a particular type of object, namely an instance of a property. Although the resulting interpretation is very similar to meanings obtained by degree modification in the adjectival domain, the mechanism by which it is brought about is different. The relevant reading obtains with nouns that denote abstract properties whose instances have abstract size (e.g. *idiocy*, *courage* etc.), or with nouns that denote sets of individuals (concrete or abstract, human or non-human) that are characterized by such a property (e.g. *idiot*, *blunder* etc.). This is, therefore, the picture of gradable nouns that emerges from the discussion in this section.

This means that, so far, we have no good evidence in favour of the existence of adnominal degree modifiers or of an explicit gradable structure in the semantics or syntax of these nouns that would be completely parallel to that of adjectives. As for the more general implications this has for using the distribution of these adjectives as a test for gradability, again, we are left with inconclusive evidence, although we may still maintain that the observed meaning effects arise with a limited class of nouns – namely those which encode a gradable property in their lexical meaning, and this may still be used as an indication of the gradable status of these nouns.

3 Evaluative adjectives

In this section we examine a class of adjectives which is generally taken to include both adjectives which in their basic use express qualitative evaluation, such as *terrible*, *awful*, *dreadful* etc., and adjectives which express amazement, such as *incredible*, *amazing*, *extraordinary* etc. (cf. Paradis 2000, Nouwen 2005, 2011a, Morzycki 2008b, Schwager 2009, de Vries 2010). As briefly illustrated in the introduction to this chapter, as well as in chapter 1 (§2.2), these adjectives can be used to modify gradable nouns (e.g. *a terrible fool*, *an unbelievable weirdo* etc.) and seem to give rise to high degree readings, parallel to the use of their adverbial counterparts in the adjectival domain (e.g. *terribly foolish*, *unbelievably weird* etc.). The nouns they can be used to modify in the relevant degree sense are generally a subset of the nouns that can be modified by size adjectives. For reasons of space, in what follows we will restrict our attention to *terrible*-type adjectives. (For remarks on *amazing*-type adjectives, see Nouwen 2005, 2011a, de Vries 2010;[264] see also Katz 2005, Nouwen 2005, 2011a, Morzycki 2008b for analyses of the corresponding adverbs). The adjectives in this class seem to display more lexical idiosyncrasies as compared to the class of size adjectives examined in section 2, as well as to their adverbial counterparts. However, a number of clear patterns seem to hold, both in terms of their distribution with respect to types of nouns and in terms of their distribution with respect to syntactic position. Some of the restrictions that can be observed in their distribution also turn out to be quite systematic, and may therefore play a role in the analysis these adjectives should be given. At first sight, their distribution and interpretation makes these adjectives likely candidates for the status of adnominal degree modifiers. But it will be shown in this section that the facts may also support an alternative analysis of these adjectives which capitalizes on their evaluative interpretation, which we take to be an expressive sort of meaning, and does not involve the manipulation of gradable structures.

3.1 Distribution, interpretation and the degree analysis

In this sub-section we will examine the basic facts about the distribution and interpretation of evaluative adjectives, which seem to suggest that they may be analysed as degree modifiers, similarly to their adverbial counterparts, which have been analysed as degree modifiers in the adjectival domain (cf. Doetjes 1997, Katz 2005, Nouwen 2005, 2011a, Morzycki 2008b etc.).

To start with, the following series of examples illustrate the basic, literal use of the adjective, which describes the objects denoted by the modified nouns in terms of negative quality, whether that is a [+human] individual as in (44)a, or a [-human], mass or count, concrete or abstract object, as in (44)b-c.

[264] The interested reader may also consult Schwager and Castroviejo-Miró 2008 and Schwager 2009 for an analysis of *amazing* (though not in the context of gradable nouns, but only in its use as main clause predicate of nominal exclamatives – e.g. *It's amazing the people that come here!*).

(44) a. a terrible {guy/ doctor}
b. terrible {news/ behaviour}
c. a terrible {place/ story/ idea}

Now consider the following series of examples, which contain gradable nouns of various types:

(45) a. a terrible {braggart/ fool/ bore}
b. terrible {nonsense/ negligence}
c. a terrible {shame/ mess}

In these examples, the adjective seems to contribute a high degree interpretation. For example, *a terrible fool* is understood to be 'a terribly foolish person'. In other words, the relation between the adjective and the noun it modifies seems to parallel the relation between a degree modifier (e.g. *terribly*) and a gradable adjective (e.g. *foolish*). The question we would like to answer in this section is whether this is indeed how evaluative adjectives function.

All the adjectives in this class encode a notion of extremeness in their lexical meaning, i.e. they are 'extreme' adjectives (cf. Cruse 1986, Paradis 2001, Morzycki 2010). Such adjectives have been argued either to indicate the ultimate point of the scale in terms of which they are conceptualised (Paradis 2000, 2001), or to involve degrees which exceed the contextually provided set of salient degrees, or which go "off-the-scale", so to say (Morzycki 2010). What seems to underlie the degree use of these adjectives, similarly to their adverbial counterparts, is a loss of lexical meaning in favour of retaining only the high degree component (cf. Doetjes 1997, Paradis 2000).[265] And even in that component there has been some change, or reduction: the adjectives have lost their inherent superlativity or relation to the extreme, end-point of a scale, and have simply come to indicate high degree (cf. Paradis 2001).

Returning to the distribution of evaluative adjectives, similarly to *big*-type adjectives, they cannot generally be used to modify in a degree sense nouns used figuratively. The examples below, which contain nouns that in other contexts were shown to receive figurative, stereotypical interpretations, cannot be modified by *terrible* on the intended reading:

(46) a terrible {lawyer/ clown/ boy}

The nouns in (46) can only be interpreted in their basic, literal meaning and the adjective *terrible* receives its basic, qualificational interpretation: the examples say something about the negative quality of the individuals – either in terms of general personal quality, or qua the role expressed by the N (as with *lawyer* or *clown*). The nouns cannot receive figurative interpretations so that the examples would be interpreted as being about individuals who are terribly litigious, or manifesting clown-like behaviour, or behaving in a very childish way, without being an actual

[265] In fact, the original meanings of *awful*, *dreadful*, *horrible*, *terrible* were 'awe/ dread/ horror/ terror-causing'. This seems to have been weakened to 'something very bad' (cf. Paradis 2000), or, rather, to have become less specific.

lawyer, clown or child. However, as also discussed in the previous sub-section, some nouns, such as *baby*, can be used in their figurative meaning and intensified by *terrible*, as illustrated in (47). Given that such modification is generally not possible, this seems to confirm the suggestion made in §2.1 and §2.4.1 (cf. examples (7), (9)a and (41)b), namely that this meaning of *baby* has become lexicalized, and the noun is thus similar now to nouns of the type *idiot*.

(47) a. I am a terrible baby when it comes to pain.
b. He is being a terrible baby about it.

So far, based on their distribution and interpretation, it would seem that evaluative adjectives are good candidates to the status of degree expressions that would fulfil in the nominal domain the same function as their corresponding adverbs in the adjectival domain. The distribution of these adjectives with respect to syntactic position seems to offer further support to such a view.

The examples in (48) suggest that the degree(-like) interpretation of these adjectives is restricted to the prenominal attributive position.

(48) a. a terrible idiot
b. That idiot {is/ seems} terrible.

In (48)b, where the adjective is used predicatively, the intended reading found in (48)a is not available. The adjective can only receive its basic, literal interpretation, whereby the individual in question (who is an idiot) is attributed a general negative qualitative evaluation.

In fact, these adjectives seem to be more strictly restricted to the prenominal attributive position on the degree reading than size adjectives, and to resist more stubbornly the predicative use under the relevant interpretation. Although the distinctions are not always very clear-cut, the degree(-like) interpretation does not seem to be present in predicate position even when the subject is one of the nouns that allowed the predicative use of size adjectives on an interpretation that was not distinguishable from the one obtained in the attributive prenominal position (cf. §2.2). Consider the following examples:

(49) a. They left behind a {terrible/ awful} mess.
b. The mess they left behind was {terrible/ awful}.

There is a contrast here between the prenominal and predicative uses, even though it may be somewhat less clear than in (48), at least at first sight. While (49)a can clearly (and easily) be interpreted in a way parallel to 'terribly messy', where the messiness is emphasized or intensified, (49)b is perceived to be more neutrally descriptive of the situation as being qualitatively negative – either because of the way it is or because of its consequences etc. Perhaps surprisingly, the contrast is even clearer with abstract mass nouns:

(50) a. his {terrible/ awful} {negligence/ ignorance}
b. His {negligence/ ignorance} was {terrible/ awful}

While the degree interpretation is available in (50)a where the adjective is used attributively, (50)b is interpreted as 'the fact that he was {negligent/ ignorant} was terrible' or 'the way in which his {negligence/ ignorance} was manifested was terrible' (probably due to the consequences etc.). This is not surprising. As has been noted in the literature, abstract mass nouns denoting properties can be interpreted as facts in addition to being interpreted as concrete manifestations of properties, i.e. instances of properties (cf. Van de Velde 1996, Moltmann 2004a,b, Nicolas 2002, 2004, 2010 a.o.). However, an interpretation in terms of the high degree of the property (i.e. 'he was {terribly/ very} {negligent/ ignorant}') does not seem to be accessible. This may be a surprising result given that a prominent property of abstract mass nouns has been argued to be their giving rise to an interpretation in terms of degrees, as the unmarked option, in a variety of contexts (cf. Van de Velde 1996, Tovena 2001) – this is also what was seen in section 2 in the context of size adjectives. This is important as it may tell us something not only about the meaning of the adjective, but also about the meaning of this type of nouns more generally. The absence of the degree interpretation in this context might be taken to suggest that this is not the basic denotation of such nouns and that, in those contexts where a paraphrase in terms of degrees is available, it arises either as the result of some sort of coercion, or as an alternative way of understanding the application of certain modifiers or predicates to instances of properties (cf. also discussion in Nicolas 2010 and in §2.4). This confirms the conclusions reached in §2.4, where the latter view is taken in the analysis of size adjectives. The possible paraphrase of (50)b in terms of a fact may reflect a similar process. If an instance of a property is *terrible*, that may be because of the particular way in which it is manifested and the consequences it has, or because of the mere fact of its existence, the latter resulting in a fact interpretation. This means that we can maintain an unambiguous semantics for the nouns, as denoting instances of properties, and view the other possible or apparently different interpretations as ways of understanding particular modifiers or predicates in the context of these objects.[266]

In sum, the distribution of evaluative adjectives on the relevant interpretation with respect to types of nouns (i.e. inherently gradable) and to syntactic position (namely, strictly prenominal) suggests that they may be analysed as adnominal degree modifiers (cf. Nouwen 2011a for a suggestion in this sense, and de Vries 2010 for an explicit proposal),[267] similarly to to their adverbial counterparts, which have been analysed as degree modifiers in the adjectival domain (cf. Doetjes 1997, Katz 2005, Nouwen 2005, 2011a, Morzycki 2008b etc.).[268] This view could be

[266] An interpretation in terms of facts may also be an actually distinct interpretation arising as the result of coercion; this might be the case when such nouns occur as arguments to verbs like *acknowledge*, *admit* etc.

[267] Recall that in being strictly prenominal, evaluative adjectives differ from size adjectives, which were seen to be able to occur in predicate position on the relevant reading when the subject is a noun of the right sort. This also means that an alternative account such as that proposed in §2.4 for size adjectives would not be applicable to evaluative adjectives. But see next sub-section for a different proposal.

[268] Note that on Morzycki's (2008b) account degree intensification is not included in the actual lexical meaning of these adverbs; they are taken to denote properties of propositions and combine with adjectives through the mediation of a phonologically null degree operator [R]. They are interpreted as arguments of this invisible degree morpheme and perform a widening of the domain of salient degrees; this is how degree intensification comes about.

implemented either within a degree-based or a degree-less approach to gradability. Both approaches would make similar predictions about the syntactic behaviour of these adjectives: if they involve operations on the gradable structure of a noun (and are possibly hosted by a dedicated functional projection – cf. Morzycki 2009, de Vries 2010), then they can only occur in this particular configuration, i.e. prenominally (see similar discussion in §2.2.1).

Further examination of the distribution and interpretation of evaluative adjectives, however, brings up some problems for the view that evaluative adjectives are degree expressions that would fulfil in the nominal domain the same function as their corresponding adverbs in the adjectival domain. In particular, evaluative adjectives are subject to restrictions that are not found with their adverbial counterparts. In the next sub-section, we will consider some additional data and suggest an alternative account of evaluative adjectives.

3.2 Some additional facts and an alternative account

Based on the distribution and interpretation facts considered in the previous sub-section, it would seem that evaluative adjectives are good candidates for the status of adnominal degree expressions, similarly to their adverbial counterparts. However, some additional facts shed some doubt on this view. It will be shown in this sub-section that evaluative adjectives in fact differ from the corresponding adverbs insofar as they are subject to certain (systematic) restrictions that their adverbial counterparts lack. In addition, as also discussed in §2.2, the restriction to the prenominal position is not enough to assume that they are degree modifiers. Based on the observed restrictions, we will suggest an alternative account, which capitalizes on their evaluative meaning.

The most notable feature of the distribution of *terrible*-type adjectives, and one which may play a significant role in deciding on their analysis, is probably their restriction to negative nouns.[269] This is suggested by the following contrast:[270]

(51) a. an awful mess
b. a terrible bore

(52) a. ??an awful pleasure
b. ??a terrible {genius/ beauty/ joy}

[269] It should also be noted that there is quite a large amount of idiosyncratic behaviour (i.e. cases of individual collocational, even idiomatic, A-N combinations) among the adjectives in this class on the relevant reading, in addition to the (rather systematic) restrictions that have been discussed above. For example, the adjective *dreadful* can easily be used on the relevant interpretation with nouns like *coward* or *bore*, but it is somewhat less normal with *fool*, and even less so with *weirdo*, and while it is common to talk about *a dismal failure*, it is less so to talk about *dismal mistakes*, though this is not completely excluded either (see Bolinger 1972 for more examples of this sort). (cf. also Nouwen 2005, 2011a and de Vries 2010 for similar remarks on *amazing*-type adjectives – e.g. while *an unbelievable weirdo* is fine on the relevant reading, *an unusual/ surprising weirdo* cannot receive this interpretation.)

[270] Example (52)a is from Paradis (2000).

In this respect, they differ from the corresponding adverbs, which are compatible with adjectives irrespectively of their polarity, or connotations:

(53) a. awfully kind
b. terribly nice

On the one hand, this may suggest that the adverbs may have undergone a more drastic process of semantic bleaching and abstraction and are, thus, more grammaticalised than the corresponding adjectives, which retain the negative connotation. On the other hand, it shows that the facts are not completely parallel in the nominal and adjectival domains. This suggests that it is not the case that, in *a terrible N* and *terribly A*, *terrible/y* is the same lexical item with the same meaning, i.e. a degree modifier, only differing in shape depending on the syntactic environment in which it is inserted (i.e. nominal vs. adjectival or verbal).

This sort of restriction in the distribution of evaluative adjectives may in fact suggest an alternative way of understanding (and analysing) them. When the negative evaluative adjective modifies a noun with a negative connotation, this results in "boosting" the negative connotation of the noun. This indirectly results in intensifying the property to which the negative connotation is associated.[271] For example, if someone is said to be both *an idiot*, which attributes a property which is generally evaluated as being negative, and *terrible* (as one), i.e. being additionally negatively evaluated, results in a reinforcement that ultimately is taken to bear on the property attributed to start with (i.e. the idiocy). If he is said to be *a terrible idiot*, it will be inferred that this is because he is very idiotic, rather than just average. In other words, the reported degree interpretation may not be due to the actual truth-conditional semantics of the adjectives that would operate on the degree structure of the modified noun. Instead, it may simply arise as an effect of this 'boosting', i.e. as an implicature, in the context of nouns that lexically encode a property that has a negative connotation and that also happens to be gradable.

This view, which capitalizes on the (negative) evaluation contributed by the adjective, finds some additional support. First of all, while not generally able to modify nouns used figuratively (recall the examples in (46)), *terrible* may, at least to some extent, co-occur with nouns used with this sort of interpretation in *N of an N* constructions, which were argued in chapter 2 to be environments which require an interpretation in terms of a (typically negative) value judgment:

(54) a. (what) a box of a house
b. a terrible box of a house
c. ??That house is a terrible box.

[271] We may add here cases of intensification achieved by semantic repetition, such as those illustrated in (i) – we talk about semantic repetition here given that all lunatics are crazy, and all mistakes are bad (cf. Bolinger 1972):
(i) a. crazy lunatic
b. bad mistake

Secondly, other nouns, whose epithetic use is based on an originally figurative interpretation also allow such modification, though judgments sometimes vary among speakers (unlike with nouns like *idiot* or *fool*):

(55) a. I guess they figured if the lights were too strong, the patrons would see what a terrible wreck the theater was and not come back.[272]
b. (?)His house was a terrible pigsty.

One way of approaching such data, would be to think that, since *terrible* independently tends to modify nouns with a negative connotation, it is also likely to show up when such nouns are used figuratively. However, this would predict a much wider distribution with figurative uses than is actually found. Alternatively, as suggested above for *baby*, it may be that these uses have become conventional meanings for some nouns (e.g. *wreck* and *pigsty* have come to simply mean something like 'mess' or 'messy place'), but not for all, or not for all speakers – hence the variation. The latter hypothesis seems to be supported by the possible co-occurrence of such adjectives with typical, conventional epithet nouns like *bastard* etc.

(56) He's a terrible {bastard/ bully}.

Finally, expressives (e.g. expletives like *fucking*, *damned* etc. by which a speaker may signal a marked emotional attitude to what is said, and interjections like *man*, *boy*, *gosh*) have also been shown to interact in similar ways with gradable expressions (cf. Nouwen 2005, 2011a, McCready 2005, 2009).

These facts support the alternative view of evaluative adjectives suggested here, which capitalizes on their subjective evaluative interpretation. It may be assumed that they have an expressive meaning and involve some notion of general qualitative evaluation. Expressive meaning has been most prominently analysed in relation to expressions like *the jerk* or *fucking*, *damn* etc., whose main function is to display some kind of evaluative attitude or emotion. Potts (2005) takes them to be expressions which convey conventionally implicated content, and he develops a multidimensional logic for dealing with conventional implicatures (CIs). Such expressions, therefore, are interpreted in a separate dimension from that of truth-conditional or at-issue meaning. Cruse (1986), Aoun, Choueiri and Hornstein (2001), Corazza (2005), and Potts (2005) assume that expressives are always speaker-oriented, regardless of syntactic position. Our evaluative adjectives, however, are not exclusively speaker-oriented; shifts in perspective are allowed, as suggested by (57), where the opinion can be attributed to the subject of the report and not to the speaker. But the adjective need not be speaker-oriented even when it is not syntactically embedded, as suggested by (58), where the evaluation can be attributed to the subject.

(57) a. Lina said that a terrible idiot had given her a hard time at the tax office.

[272] Source: *Growing up Latino. Reflections on Life in the United States*, H. Augenbraum and I. Stavans (eds.), available at http://books.google.com/books.

b. Lina didn't know if that terrible mess would bother anyone.
c. Lina thought that no one would accept that terrible nonsense.

(58) Lina was looking in disbelief at the terrible mess they'd left behind...

The possibility that expressives be non-speaker-oriented has been acknowledged in the recent literature (cf. Amaral, Roberts and Smith 2007, Harris and Potts 2009 a.o.) and has led to a somewhat different view. Harris and Potts (2009), for example, propose that the source of non-speaker-oriented readings of expressives is the interaction of a variety of pragmatic factors; in general, these interactions favour speaker-orientation, but other orientations are always in principle available, regardless of syntactic configuration. They thus propose enriching Potts's (2005) multidimensional view of semantic composition with a theory of perspective taking in context such as Giannakidou and Stavrou (2008) and Lasersohn (2005). This way of relativizing the evaluation to a judge could also capture the facts illustrated above for evaluative adjectives. But there is a quirk. Built into Potts' (2005, 2007) theory are the following two claims: (i) expressive content never applies to expressive content, and (ii) no lexical item contributes both an at-issue and a CI-meaning. Our view of evaluative adjectives seems to go counter to these claims. If we say that evaluative adjectives reinforce a negative connotation in the meaning of the nouns they modify, that suggests that the nouns themselves may involve an expressive meaning component; that, however, cannot be their only content – they clearly also contribute an at-issue meaning. This contradicts claim (ii). Moreover, saying that the evaluative adjectives modify this meaning of the noun implies that expressive content should be able to modify expressive content, which contradicts claim (i). It should be pointed out, however, that these two claims have been challenged. Gutzmann (2008) proposes that both expressive modifiers of expressives (e.g. *that fucking bastard Jones*) and mixed expressives (e.g. *cur* 'dog + expressing a negative attitude') do in fact exist. He consequently proposes extending the logic by adding new type definitions and corresponding composition rules. This extended logic could also deal with our evaluative adjectives.

Finally, note that this account can also capture the syntactic distribution of evaluative adjectives. In the previous sub-section it was shown that evaluative adjectives are restricted to the attributive, prenominal position on the relevant reading. It was accepted in that context that this restriction may be taken as an argument in favour of analysing these elements as degree expressions. However, as pointed out in §2.2, this distributional pattern is typical of non-intersective, non-predicative adjectives more generally, and is not necessarily connected to gradability or degree. In §2.2 we discussed several examples which showed that the prenominal attributive position seems to make available a particular way of combining the adjective and the noun that enables the former to access a component internal to the meaning of the latter. There is also another class of cases that exhibit such a restriction to the prenominal attributive position: subjective, speaker-oriented or expressive modifiers are strictly prenominal (cf. Laenzlinger 2005, Morzycki 2008a, Potts et al. 2009 a.o.). Some examples are given below (if the predicative uses are at

all acceptable, they have a completely different meaning). This is precisely the class of adjectives to which our evaluative adjectives belong.

(59) a. this {fucking/ damned} dog [English]
a'. This dog is damneded.
b. ce {sacré/ pauvre} prof [French]
this bloody/ poor teacher
'this {bloody/ poor} teacher'
b'. Ce prof est {??sacré/ pauvre}.
this teacher is holy/ poor
'This teacher is {?holy/ poor}.

In sum, the additional facts considered in this sub-section, as well as a reconsideration of facts introduced in the previous sub-section, suggest that evaluative adjectives may be analysed as evaluative, expressive modifiers of nouns. On this view, the apparent degree reading comes about indirectly, as an implicature, due to the reinforcement of the negative connotation of the noun by the adjective.

3.3 Concluding remarks

At first sight, their non-intersective behaviour in terms of syntactic distribution and the associated interpretation makes evaluative adjectives likely candidates for the status of degree expressions, which would fulfil in the nominal domain the same function that is fulfilled in the adjectival domain by their adverbial counterparts. However, the particular restrictions on their distribution, which bring out differences with respect to their adverbial counterparts, shed some doubt on this view, and suggest an alternative approach which capitalizes on their evaluative nature. They involve an evaluative, expressive meaning. This can also explain their restriction to the prenominal attributive position, as well as the apparent degree interpretation, which is seen as a result of the "repetition" of an evaluative connotation associated with the property encoded in the meaning of the modified nouns. In other words, evaluative adjectives of the *terrible*-type need not be analysed as actual degree modifiers. The apparent degree interpretation may not necessarily be brought about by a mechanism in which gradable structures are actually manipulated, but it may rather simply be an implicature that arises due to the interaction between the negative evaluation contributed by the adjective and the negative connotation of the noun. Although the facts are not completely conclusive and do not clearly overrule one or the other account (e.g. one may find ways to save the degree account), the alternative view may be favoured if one also considers the general lack of evidence for the existence of other adnominal degree modifiers/ operators, which will become even clearer once we examine adjectives of veracity and totality in the next section.

4 Adjectives of veracity

This section turns to an examination of another category of adjectives which have been argued to function as degree adjectives (cf. Bolinger 1972, Morzycki 2009), namely adjectives of veracity like *real* and *true*. We will show that they do not in fact (need to) operate on gradable structures, and argue that their semantic contribution can be best understood in terms of epistemicity/ evidentiality. Consequently, they cannot be taken to provide evidence for the existence of adnominal degree morphemes. We will propose that this view can be extended to other adjectives as well, namely adjectives like *sheer*, *pure* and *perfect* (see §4.5), and will end this part of the chapter with a suggestion that adjectives which express totality (e.g. *complete*, *total*, *absolute* etc.) can be approached in a similar way.

4.1 The distribution and interpretation of *real*

This section focuses on the distribution and interpretation of the adjective *real*, which has been claimed to be a degree adjective (cf. Bolinger 1972, and especially Morzycki 2009, who argues that it is an adnominal degree morpheme). However, upon closer scrutiny, it turns out that its distribution (and interpretation) is rather different from that of a degree expression. The discussion in this section will, therefore, set the scene for the alternative proposal which will be put forth in §4.2, and which will be subsequently extended to the adjective *true* in §4.3.

To start with, consider the following sets of examples.

(60) a. That's a real gun.
b. That gun is real.

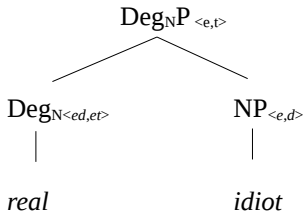
(61) a. That guy is a real idiot.
b. #That idiot is real.

These examples show that the adjective *real* exhibits two different distributional patterns which correlate with two different interpretations. In (60) *real* can be used both attributively and predicatively with the same interpretation. In both cases *real* is interpreted as antonymous to *fake*, a privative adjective which, notoriously, entails that the objects are not Ns, as well as of other modifiers, such as *toy* and 'constitutive material' modifiers, which also entail that the objects are not Ns, but "representations/ models of N" (cf. Partee 2010, in press). So the gun in question may be contrasted with a fake gun, or a toy or plastic gun. The examples in (61) illustrate a different pattern and interpretation. The example in (61)a, where *real* is again used attributively, is not about a 'non-*fake*' idiot. Instead the adjective seems to emphasize that the property denoted by the noun indeed holds of the individuals in question. The corresponding predicative use attempted in (61) is not possible. The interpretation *real* gets in (61)a is not available in predicate position. (It is also not very natural to interpret (61)b as saying that the idiot is not fake, so the example

remains odd even on this interpretation which is in principle available.) While the distribution and interpretation of the 'non-*fake*' use of *real* is quite straightforward, the 'other' *real*, the one illustrated in (61), is more intriguing. This is the *real* that will be the focus of this section.

Examples like (61) have been argued to involve a degree use of the adjective *real* (Bolinger 1972, Morzycki 2009). Mozycki (2009) analyses it as an adnominal degree morpheme which occupies the Deg_N-head position of the Deg_NP projected by a gradable noun, as shown in (62).[273]

(62)



Such an account predicts the impossibility of this element to appear in predicate position. This is because semantically it needs to operate on a degree argument (or, within the particular theory of gradability adopted by Morzycki, to take a measure function as their argument) and because syntactically it is linked to the Deg_NP, which is part of the extended nominal projection of a gradable noun, and hence unavailable outside of the DP. As for the interpretation, he proposes that the semantics of this expression may be understood as being similar to that of *very* in the adjectival domain. (Surprisingly, in fact, he does not mention its direct adverbial counterpart *really*.)

However, upon closer consideration of the data, this view is faced with serious problems. Next to uses with 'gradable nouns', such as the ones in (61) above, *real* can be used with non-gradable nouns as well. In what follows, we will discuss and analyse the data concerning the distribution and interpretation of *real*. We will show that, on the one hand, there is no reason to offer different analyses for the two types of cases, and that, on the other hand, the facts do not support an analysis of *real* as a degree expression in any of the cases; its semantics cannot be reduced to degree.

The examples below show that *real* can modify non-gradable nouns:

(63) a. That's a real sports car.
b. That's a real bird.

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[273] Morzycki (2009) provides an additional argument in favour of the idea that *real* and *true* (as well as *absolute*, *complete*, *total*) are heads, differently from size adjectives, which, as already discussed in he argues to be degree modifiers. This has to do with the fact that, unlike size adjectives, these other adjectives do not allow their own degree modification, which is, however, allowed on their literal use, as illustrated in (i):

(i) a. #a {very/ quite/ fairly/ rather} {total/ complete/ absolute/ utter} idiot
b. a {very/ quite/ fairly/ rather} complete description

In §4.4 we will propose an alternative explanation.

These examples can receive the 'non-*fake*' interpretation illustrated in (60), so that the individuals in question may be contrasted, for example, with toy cars or plastic birds. But they can also be interpreted similarly to the examples in (61), in the sense that it is emphasized that the individuals in question have the properties characteristically associated with cars or birds (in the speaker's view). For example, (63)a may be used about a car with a powerful engine (as opposed to a *mini smart*), and (63)b could be used with reference to an eagle (as opposed to a kiwi bird).

Real can also modify nouns that receive figurative, stereotypical interpretations (it "embraces metaphorical extensions", Bolinger 1972), as illustrated below. In this respect it differs from other adjectives, e.g. size adjectives or evaluative adjectives, which have been seen not to be able to modify such nouns on the relevant interpretation.[274,275]

(64) a. He is a real lawyer, the way he goes about proving his case.
b. This boy is a real clown.
c. Their new place is a real palace.
d. This place is a real pigsty.

What these examples say is that the speaker has good reasons to ascribe the objects in question to categories defined by properties stereotypically associated with lawyers, clowns, palaces or pigsties, although they are not actual lawyers, clowns, palaces or pigsties. These noun interpretations were already discussed in chapter 3 (§3.4) in the context of internal *such* as well as in section 2 of this chapter, where it was shown that they should not be considered gradable.

Finally, even when it modifies gradable nouns, it seems to manipulate the meaning in a way that is not dependent of gradability. Take nouns derived from activity verbs, such as *eater*, *smoker* etc. Though examples like *a real eater* may sound a bit odd at first when uttered out of the blue, they certainly do occur, as shown in (65).

(65) a. Someone like Orson Welles – a bon viveur and a real eater.[276]
b. My buddy and dining companion is over 200 pounds and a real eater.[277]

In these examples, *eater* seems to receive a high-degree interpretation – they are about people who 'indeed eat a lot'. But this is presumably just an effect of the fact that *real* emphasises that they undoubtedly belong to the category of 'eaters'. The fact that what matters for making modification by *real* possible is being able to establish a category to which an individual is said to certainly belong is also suggested by the facilitating role of contrast illustrated in (66).

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[274] Example (64)a is from Bolinger (1972).

[275] The adjectives *veritable* and *regular* are also compatible with metaphorical interpretations, the former in formal, and the latter in non-formal register (see Bolinger 1972 and Lakoff 1973 for discussion):
(i) He is a {veritable/ regular} lawyer, the way he goes about proving his case.

[276] Source: http://www.thefreelibrary.com/Your+Life[...]a0194167703

[277] Source: http://local.yahoo.com/info-30688478-presto-pizza-italian-restaurant-trattoria-miami-beach

(66) "I'm not a salad girl," she said. "I'm a real eater."[278]

A contrast is expressed here between two classes. The first is that of people who eat scarcely or only 'light' food, and, in opposition to that, *a real eater* is used to describe someone who eats all sorts of food, and who would, therefore, in the speaker's opinion, meet the requirements for clearly qualifying as an *eater*.

To sum up, it has been shown that the adjective *real* has two uses: one on which it is the antonym of *fake*, and another one where it seems to emphasize that the property denoted by the noun holds of an individual (including figurative interpretations of nouns). That the two uses are indeed distinct is also indicated by the fact that they may be juxtaposed without that leading to a contradiction:[279]

(67) Their place is not a real palace, but it's a real palace!

It has also been shown that the other *real* cannot be regarded as a degree adjective as it has a much wider distribution and its interpretation does not seem to involve or be reducible to degree. In the next sub-section we will propose an alternative analysis, in terms of evidentiality, and show that it can account for the data discussed here.[280]

4.2 *Real* as an epistemic/ evidential adjective

In this sub-section we will try to make a bit more precise our view of the semantic contribution of the 'other' *real*, which we propose is to be understood in terms of epistemicity and evidentiality throughout. We will henceforth be referring to the relevant *real* as 'evidential *real*'.

Recall that in the preceding sub-section it was shown that *real* has two distinct uses. We would like to first briefly present here a particular analysis of its basic 'non-*fake*' use, namely that proposed by Partee (2010, in press), since we will subsequently suggest that the interpretation of its evidential counterpart involves a mechanism that performs, in some sense, quite the opposite sort of operation. Partee proposes that the use of modifiers like *real* and *true* triggers the coerced expansion of the denotation of the noun to which the adjective is applied. This enables her to re-analyse privative adjectives like *fake* as subsective. She argues that such coercion can be motivated by treating the constraints on possible adjectives meanings as presuppositions that must be satisfied by any use of an adjective; the corresponding coercion may then be seen as a form of presupposition accommodation. Thus, while normally in the absence of a modifier like *fake* or *real* all guns are understood to be

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[278] Source: http://www.nytimes.com/2003/05/28/dining/miss-labelle-s-kitchen-hot-sauce-and-gold-lame

[279] Intonation seems to play a role in disambiguating the meaning in each case: the first occurrence of *real* in (67) carries heavy stress, while in the second part of the sentence it is *palace* which is stressed (*real* may be stressed too, but less than in the first case). It was also noted in chapter 3 that intonation (stress) may be needed to disambiguate the interpretation of nouns that may be used figuratively.

[280] In more recent work Morzycki argues that *real* and *true* do not involve a degree semantics, but involve scales of prototypicality (Morzycki 2011). As will emerge from the discussion in this and the next sub-section it is not prototypicality that is relevant, but something different; this is why we will not investigate this proposal in more detail here.

real guns, in examples like (68) the denotation of *gun* and *fur* is expanded so as to include both fake and real guns and fur, respectively.[281]

(68) a. Is that gun real or fake?
b. I don't care if that fur is fake (fur) or real (fur).

Partee points out that without the coerced expansion of the denotation of the noun, not only would *fake* be privative, but the adjective *real* would always be redundant (a property also noticed in passing by Lakoff 1987 – apud Partee 2010, in press.). She notes that since this is always necessary with privative and "tautologous" modifiers, there might even be something in their lexical semantics that particularly indicates the need to shift the head to which they apply. At any rate, this shift enables one to interpret the [Adj+N] predicate in such a way that both its positive and negative extensions are non-empty (cf. Kamp and Partee's 1995 "Non-Vacuity Principle").

We suggest that, on the evidential use of *real*, the domain is affected in quite the opposite sense, namely it is, in some sense, narrowed down. The speaker seems to divide up the domain normally covered by N into those objects that, according to him/ her, undoubtedly have the properties associated with N and, hence, fall into the positive extension (and are, therefore, *real Ns*) and those that do not. This may also explain the fact that speakers report that the use of this adjective seems to imply a contrast, to involve the presence of some assumed alternatives.

It is important to note that the notion of "reality" involved in the interpretation of *real* is not to be understood in terms of "absolute truth" (so that it is not the case that the object has in the actual world all the properties it can have in any accessible possible world). Rather it is relativized to the speaker's beliefs. That is, *x is a real N* says that 'in the speaker's belief world *x* is [in the positive extension of] N'. When using *real*, the speaker emphasizes that s/he has good reasons to describe *x* as an N because *x* clearly displays the characteristics which typically define N in his/her opinion. We have here, then, an evidential component, which provides the basis for the epistemic certainty with respect to the categorization performed. Our view of *real* is similar to what Paradis (2003) argues for its adverbial counterpart *really*, namely that its use is conditioned by the speaker's wish to qualify an expression epistemically with a judgement of truth as perceived by the speaker. This speaker-dependence is also noted by Bouchard (2002) in his analysis of the French counterpart of *real*, *réel*. Bouchard argues that prenominal *réel* modifies the characteristic function (i.e. the property defining the noun – cf. §2.4.2 for more discussion of this approach). Thus, in *un réel besoin* 'a real need' the adjective is argued to apply to the characteristic function and to indicate that it applies exactly, that all the properties required by it are verifiable, so *un réel besoin* is 'something which is truly a need'; it also indicates that the authentication is done by the speaker (unlike with an adjective like *authentique* 'authentic, genuine'). He also points out that it is only when used prenominally that the adjective is in a position to modify an

[281] Note that on a subsective reanalysis of these adjectives (on which they are similar to e.g. *skilful*) it is no longer unexpected that they can can appear in predicate position (cf. also *{John/ This violinist} is skilful.*), while this would be problematic if they were non-intersective non-subsective.

internal subpart of the noun meaning in this way. Indeed, as already indicated at the beginning of §4.1, unlike its 'non-*fake*' counterpart, evidential *real* entirely resists the predicative use.[282] We take this total lack of predicative use to indicate that it is indeed an instance of an exclusively non-intersective non-predicative (i.e. intensional) adjective in the sense of Siegel (1976). It participates in construing the property that the NP will denote – and, in doing so, it brings in an epistemic and evidential component, redefining, in a way, based on the speaker's view, what counts as an N.

We are now in a position to also explain the apparent degree interpretation *real* has been claimed to have in the context of gradable nouns. This comes about as a result of the interaction between the 'evidential' *real* and the gradable nouns, i.e. nouns whose domains are saliently defined by a gradable property. When *real* is used to modify a noun like *idiot*, a division of the domain is performed, as indicated above, into those individuals that the speaker has no doubt fall into the positive extension (i.e. 'are *real* idiots') and those that do not (i.e. 'are not *real* idiots'). The former set, of individuals to which the [gradable] property undoubtedly applies, will end up containing the individuals to which the property applies to a high degree, as these constitute the clearest cases of idiots.

As for the sort of properties that count for *a real N* to hold, it seems that this adjective is rather indifferent to the objective, definitional characteristics that confer actual category membership, as shown by the availability of figurative uses of nouns. The kind of properties that count are rather properties which happen to be characteristic of category members though they do not (necessarily) confer category membership. In other words, properties that merely normally hold of N in view of what people believe, or expect, an individual of a particular class, nationality, profession etc. to be like (hence: stereotypical properties). This correlates with the subjective character of *real*; the relevant "definitions" are filtered through the speaker's expectations and view of the world. In a sense then, we can say that it is by using *real* that the speaker makes 'X is an N' true (under either interpretation of N, literal or metaphorical).

This view of *real* naturally invites a comparison with *such*, which was shown in the previous chapter to also be compatible with nouns under a stereotypical, possibly figurative, interpretation. The question then arises whether the two expressions are to be treated in the same way. A quick comparison suggests that there are differences in distribution (and interpretation) between the two. *Real* seems to have a wider distribution:

(69) a. #That's such a car!
b. #That's such a table!
c. #That's such a bird!

(70) a. That's a real car!

[282] Note that in this respect it also differs from size adjectives, which were seen to occur predicatively if the subject is of the right sort. The nouns in (i), for example, allow the predicative use of size adjectives on the relevant reading. However, even with such nouns, *real* can only be understood in its 'non-*fake*/*pretended*' use.
(i) His {courage/ sorrow} was real.

b. Now, that's (what I call) a real table!
c. That's a real bird.

In chapter 3 (§3.4) it was suggested that simple objects like cars, chairs, tables etc. are not easily associated with stereotypical images, which would enable the construal of the type of denotation that internal *such* would be compatible with. That is, there are no stereotypical properties available that could enable the inherent structuring of their domain into distinct salient sub-types identifiable by natural consequences that internal *such* could pick out. Hence the unacceptability of the examples in (69)a,b. It was also shown that internal *such* is not compatible with a prototypical interpretation, since prototypical properties do not allow one to distinguish among different salient sub-types that can be associated with natural consequences; this rules out the example in (69)c. *Real* is different from internal *such*. It does not require the existence of inherent salient sub-types identifiable by natural consequences – so one does not need a basis for construing and discriminating among such sub-types. What *real* does is to narrow down the domain to those objects which clearly fulfil the criteria in the speaker's opinion. Hence, it is not necessarily properties that can distinguish among salient sub-types (identifiable by natural consequences) that are needed, but any characteristics that undoubtedly qualify the object, in the speaker's view, as a clear case of N – e.g. size or engine quality for a car, size and/or material for a table etc.

To conclude, *real* has been argued to involve an epistemic/ evidential semantics: it says that the individuals in question undoubtedly qualify as Ns in the speaker's view. In the next sub-section this type of analysis will be extended to the adjective *true*.

4.3 Extending the analysis: the case of *true*

Like *real*, *true* has been claimed to be a degree adjective (cf. Bolinger 1972, Morzycky 2009). However, in this section we will show that the distribution and interpretation of this adjective does not support such a view either and that, instead, an epistemic/ evidential analysis like the one proposed above for *real*, can account for the facts.

To start with, just like in the case of *real*, we should distinguish between two uses of *true*. Consider the following two sets of examples:

(71) a. That is a true statement.
b. That statement is true.

(72) a. That professor is a true genius.
b. #That genius is true.

In (71) *true* can be used both attributively and predicatively on the same interpretation: in both examples it is understood as the opposite of *incorrect* or *false*. The attributive use of *true* in (72)a receives a different interpretation: the example is

not about a genius that is not false. Just like *real* in (61)a, *true* here seems to emphasize that the property denoted by the noun indeed holds of the individual in question: 'the professor is indeed a genius'.[283] This sort of interpretation is not available in the predicative use attempted in (72)b. It is also not easy to interpret (72)b as saying that the genius is correct (or, perhaps loyal?), so the example is odd. Therefore, *true* also exhibits two different distributional patterns which correlate with two different interpretations.

It is the exclusively prenominal use of *true* that is of interest to us here. Just like evidential *real*, this *true* has been argued to be a degree adjective – cf. Bolinger 1972, and especially Morzycki 2009, who analyses it as an adnominal degree morpheme which occupies the Deg_N-head position of the Deg_NP projected by a gradable noun (see discussion in §4.1 and the representation in (62) above).

However, just like in the case of *real*, such a view is faced with problems: like *real*, *true* also has a distribution that is not limited to gradable nouns, and its interpretation is not in terms of degree. The examples in (73) show that *true* can modify non-gradable nouns like *doctor*, *symphony* etc. Differently from *real*, it does not accept figurative interpretations of the type illustrated in (64). The entity described by *true* must belong to the actual category that is named by N and is then described as typical of its essence, and in this sense it seems to involve prototypicality (cf. Bolinger 1972, Morzycki 2011). Thus, while in (64)a he may be just a student, in (73)a he must be a lawyer by profession.[284]

(73) a. He is a true lawyer, a credit to his profession.
b. A true doctor would not prescribe that kind of treatment.
c. It was a true symphony.
d. I had a true vacation.
e. That's a true generalization.

This shows that the semantics of *true* cannot be reduced to degree. In addition, the fact that *true* is exclusively prenominal on the relevant reading is also not enough reason to posit that it is a degree morpheme, which operates on a measure function and is projected as the head of a nominal DegP, as argued by Morzycki (2009). Instead, just like in the case of *real*, we take the lack of predicative use to reflect the fact that the relevant *true* is an exclusively non-intersective non-predicative (i.e. intensional) adjective in the sense of Siegel (1976), which participates in construing the property that the NP will denote and brings in an epistemic/ evidential meaning component in the process. We propose, therefore, that *true* should be analysed in a similar way to evidential *real*. In what follows we will present our alternative account of *true*, as well as pointing out the differences with respect to *real*.

As we have just seen, the conditions on its use are, however, somewhat different from those applying to *real*: *true* requires *x* to be an actual N to start with (it is not

[283] Note that this interpretation is also available in (71)a, though maybe not very natural or salient: 'that is something which is indeed a statement'. But, crucially, it is never available in predicate position – not in (72)b, nor (71)b.

[284] The examples in (73)a-d are from Bolinger (1972), while (73)e is based on an example from Siegel (1976).

compatible with figurative interpretations) and then describes it as typical of its essence (cf. Bolinger 1972). In other words, *x is a true N* if *x* does not lack any of the essential components of an N. This can be understood as follows. First, the requirement that *x* be an actual N to start with may be seen as a condition that X has the characteristics which all Ns must have (in all possible worlds), i.e. the core, definitional properties of Ns (cf. McCready and Ogata 2007 for this definition of core properties). This may be defined as a presupposition on the use of *true*. Secondly, by the use of *true* it is said (or emphasised) that there is no doubt that X has all the essential characteristics of Ns, or that it satisfies all that is objectively required of an N. Take the examples in (73)a,b, for instance. They seem to imply that the individual is (not) a good lawyer/ doctor. This suggests that, with nouns denoting professions, the quality of the job performance, according to scientific and/or moral standards, plays a role. This is a salient dimension associated with profession nouns, so much so that doing one's job properly becomes one of the essential criteria in evaluating the appropriate application of *a true N* description.[285] Let us now see how this way of defining *true* helps us understand its distribution and interpretation, as well as the differences with respect to *real*.

As far as the modification of nouns that are generally taken to be gradable is concerned, the mechanism that creates the impression of a (high) degree interpretation is similar to the interaction of *real* with these nouns. There is also some difference between the two, however, in that examples with *true* seem to be more neutral, or objective, than those with *real* – e.g. *a real genius* vs. *a true genius*. This probably has to do with the fact that *true* comes with the condition that the individual in question is an actual genius, and has to have all the essential characteristics of an N. Hence the intuition that *a true genius* seems to simply say that *x* has (reached) 'genius-status'. With *real*, it is a qualification that simply holds in the speaker's belief world (though the speaker also has good reasons to make the qualification). Thus, there is an impression of a more objective evaluation with *true*, and of a more subjective one with *real*.

Furthermore, this way of defining *true* may also help us make more sense of the fact that *true* cannot modify just any noun, as shown by (74). Based on the difference in acceptability between examples like (73)a,b above and (74)a-b, Bolinger (1972) suggests that *true* is restricted to gradable nouns and "semantically rich" non-gradable nouns. According to him, the semantic enrichment of the nouns in the former set of examples comes from their social implications. Given the definition of *true* proposed above, a way to understand these facts would be in relation to the second condition. Namely, certain nouns, such as those in (74), may lack a set of (objective) salient, essential characteristics that could offer speakers a basis for evaluating whether an X belongs to the positive extension of (*true*) N.[286]

(74) a. ?He's a true farmhand.
b. ?That is a true telescope.
c. ??That's a true car.

[285] Recall that similar effects have been encountered with profession nouns in other contexts too (e.g. in *wh*-exclamatives, with *quite* etc.).
[286] Examples (74)a,b are from Bolinger (1972).

There is here, however, also a puzzling difference concerning the (un)acceptability of the same noun with *real* vs. *true*. Compare, for example, the unacceptable (74)c with the acceptable (63)a/(70)a above. We conjecture that what makes the latter acceptable, unlike the former, is that speakers can come up with (sets of) 'subjective', possibly non-essential, non-definitional attributes that would make the object qualify as *a real car* in their view. Such characteristics, however, do not count towards qualifying an object as *a true car*, given the definition above.

Finally, the presence vs. absence of a subjective, speaker-oriented component in *real* vs. *true* may also explain the compatibility of the former, but not the latter, with epithets:[287,288]

(75) a {real/ #true} {cry-baby/ pussy/ wanker/ angel}

To sum up, it has been argued in this section that the adjective *true*, just like *real*, has a semantics that is to be understood in terms of epistemicity/ evidentiality. In the next sub-section we will discuss some consequences and add some more evidence favouring this analysis over a degree analysis of *real* and *true*.

4.4 Additional evidence and consequences

It has been argued in this section that *real* and *true* should be given an analysis in terms of evidentiality/ epistemicity, rather than a degree analysis. All the evidence from the distribution and interpretation of these adjectives points in favour of the former, rather than the latter analysis. We will now discuss some additional evidence in favour of the epistemic/ evidential analysis, as well as some advantages.

First of all, the distribution of *real* and *true*, on the relevant reading, is not limited to the class of gradable nouns, i.e. it is not determined by the existence of a gradable structure in the nouns they modify. If one wanted to maintain that *real* and *true* are degree morphemes, then all the examples in (63)-(64), (70) which contain nouns that are not inherently gradable would have to be treated as cases of scalarity coercion. Unlike other "degree adjectives", *real* would, then, be able to coerce the meaning of an otherwise non-gradable noun into a gradable one – a difference not easy to explain. However, this view of the meaning of these nouns is not correct: whether interpreted figuratively or not, they do not have gradable meanings.

In addition, it has been shown that the essence of the interpretation of *real* and *true* is not in terms of an object being ranked high in an ordering with respect to the

[287] This view of *real* resonates with the way Den Dikken (2006) characterizes examples like *He's a real schoolmaster!*, namely as epithetic uses. This epithetic use is similar to the interpretation the noun receives in *N of N* constructions, which he claims are based on an (often metaphorical) comparison that is always evaluative – e.g. *that schoolmaster of a man*. Here schoolmaster stands for a set of (typically negative) properties that schoolmasters are stereotypically thought to have. In fact, many of the nouns that were seen to be able to occur in the first slot of the *N of N* construction in chapter 2 (section 2) accept modification by *real*.

[288] Not all speakers perceive a big difference between the two adjectives in the use illustrated in (75), though most do – and the less conventionalized or common the epithet, the less acceptable *true* is. It may be, however, that for some speakers *true* has become more similar to *real*, which, given our proposal, would mean that it has lost the condition that the individuals be actual Ns.

degree to which a property holds. Rather (it is emphasized that) the respective properties undoubtedly hold. The only distinction that needs to be made is a two-way distinction between those objects that (in the speaker's opinion) qualify as N and those that do not. In other words, we are dealing here with an inflexible, two-way partition of the domain. This may still be viewed as a scale, if one wanted to, but it would be just a two-valued scale, and nothing would be gained from looking at things in this way. The fact that the adjectives impose a non-graded division of the domain is reflected in the fact that they are non-gradable, and do not accept degree modification on the relevant reading, as illustrated below. So while Morzycki (2009) takes their resistance to degree modification as an indication that they are degree heads, we take it as a direct reflection of their semantics.

(76) a. #a {very/ quite/ fairly} real {idiot/ palace/ car}
a'. #a {very/ quite/ more} true {genius/ lawyer/ vacation}
b. a {very/ quite} real problem [not fake/ imaginary]
b'. a {very/ fairly/ absolutely} true statement [correct/ not false]

It was also shown that the fact that a degree interpretation appears to obtain in combination with a noun which encodes a gradable property in its meaning is an effect of the particular interaction between the semantics of the evidential adjective and that of the noun. It is not a distinct interpretation associated with a distinct lexical item that would manipulate a gradable structure, i.e. an adnominal degree morpheme.[289]

Moreover, an evidential analysis seems better suited to account for the type of distinction we find between *real* and *true*: they differ in terms of the type of evidence that plays a role in deciding whether an individual qualifies as an N, not in terms of scalar information as might be expected on a degree account.

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[289] In view of the conclusions reached in this section about the adjectives *real* and *true*, it would be interesting to (re-)examine their adverbial counterparts too.

The view expressed by Morzycki (2009) for the adjectives *real* reflects the position expressed in connection with its adverbial counterpart *really* by Kennedy and McNally (2005). They suggest that there are two distinct uses of *really* – intensifier and propositional. Their main argument in favour of this view is that examples such as (i) below are ungrammatical on the degree modifier use of *really* and are only ok on the 'propositional' adverbial use as in: *I really was very surprised*.

(i) I was really very surprised.

They conclude that (distinct) degree modifier recursion (of the type: **very quite surprised, *quite really surprised, *really very surprised* etc.) is not allowed. The only type of degree modifier recursion allowed requires identity of degree modifiers (as in *very very surprised, quite quite hungry, really really tall*), which leads them to believe that this phenomenon involves a type of reduplication at the lexical level, the output of which is a degree modifier with a semantic type identical to that of *very*. However, the view taken by McNally and Kennedy (2002) on *well* also suggests an alternative view of *really*. Kennedy and McNally (1999, 2005) treat *well* as ambiguous between a degree reading and a quality reading. McNally and Kennedy (2002) propose instead an unambiguous analysis of *well* which derives the attested readings as a result of *well* applying to different variables in the semantic make-up of the participial adjectives (their analysis is cast in a GL framework – cf. Pustejovsky 1995). This account opens the path for a similar approach to *really*.

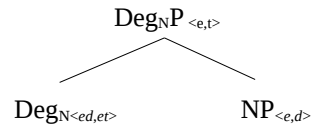
It would be interesting to see whether a unified analysis of all the uses of *really* and *truly* can be found – one that would be centred around notions of epistemicity/ evidentiality, and that would derive the possible differences in interpretation from their semantic interaction with the elements they combine with, which seems to correlate with syntactic position.

There is an additional set of facts that seem to support an evidential rather than a degree analysis. This has to do with the possible co-occurrence and relative order of "degree" adjectives. Examples may be found where *real*-type adjectives and size adjectives co-occur and the former precede the latter: *[real [big N]]*. This is illustrated below with French examples in order to avoid the problem that in English *real* is homonymous between an adjective and an adverb; on the latter use it could then be interpreted as a degree modifier of the other adjective following it, i.e. *[[real(ly) big] idiot]*, which is not the structure we are after here.

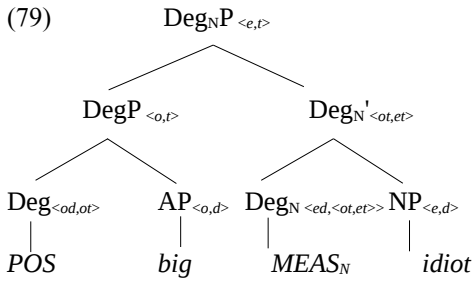
(77) a. un vrai gros {con/ fumeur}
a real fat idiot/ smoker
'a real big {idiot/ smoker}'
b. *un gros vrai {con/ fumeur}
a fat real idiot/ smoker

Such facts are predicted to be impossible on a degree analysis, especially in the particular implementation proposed by Morzycki (2009). Recall that in this analysis *real*/ *vrai* is a degree morpheme occupying the Deg_N-head position of the nominal Deg_NP projected by a gradable noun, as in (78), while *big/ gros* is a degree modifier hosted in the Spec of the Deg_NP whose head is occupied by a phonologically null $Meas_N$ operator, as illustrated in (79).

(78)



(79)



In such an analysis there is no room for (the) two degree adjectives to co-occur, syntactically or semantically, and result in the structure *[A [A N]]*. Firstly, Morzycki argues that *real* has a semantics similar to *very*, while size adjectives are treated on a par with measure phrases and are licensed by a dedicated type of Deg-head. Secondly, they must be related to expressions defined in terms of degree arguments. But once one such element has been used, an expression of the right type is no longer available. Even if this semantics could be overruled and the two were somehow made compatible and allowed to co-occur,[290] one would expect the degree modifier (*big*) to precede the Deg-head (*real*), contrary to fact. However, once *real* is analysed as an epistemic/ evidential adjective, as proposed here, rather than as a degree adjective, the co-occurrence problem disappears. As for the ordering, it

[290] For a discussion of the (im)possible co-occurrence of degree expressions (especially in the adjectival domain), see Neeleman, van de Koot and Doetjes (2004).

seems to be more generally the case that epistemic/ evidential/ speaker-oriented expressions are placed high in the structure, to the left of other modifiers (cf. Cinque 1994, 2010, Scott 1998, 2002, Laenzlinger 2000, 2005 etc. for the order of adjectival modifiers within the extended nominal projection, and: Cinque 1999, 2004, Ernst 2002, 2007 a.o. for the placement of adverbs in the clausal structure).

To conclude, in this section we have studied the adjectives *real* and *true* and have argued that they are not degree operators, but that they are epistemic/ evidential modifiers. Consequently, they cannot be taken to provide evidence for the existence of degree structures in the nominal domain that would be parallel to those in the adjectival domain. In the remainder of this section we will examine another set of adjectives which we suggest can be approached in a similar way.

4.5 Similar cases

4.5.1 *Sheer, pure, perfect*

In this sub-section we will briefly examine a few more adjectives (*sheer*, *pure*, *perfect*), which have been claimed to be degree adjectives. It will be shown that the distribution and interpretation of these adjectives does not support such a view, and that they should be approached along similar lines as proposed above for *real* and *true*.

Bolinger (1972) notes that *sheer* (in the relevant sense) is only used as an intensifier of gradable nouns.[291] The examples below illustrate its compatiblity with nouns that are generally considered to be gradable.

(80) a. sheer {terror/ nonsense/ folly/ malice/ stupidity}
b. (the) sheer {delight/ joy/ beauty/ bliss}
c. I think it is sheer genius to invent such a thing.[292]

However, the following examples suggest that *sheer* is in fact not restricted to gradable nouns, but is compatible with a rather wider range of nouns.[293,294]

(81) a. by sheer {accident/ coincidence/ will}

[291] In addition, the unacceptability of the example in (i), in contrast with those in (80)a would seem to suggest that *sheer*, like *utter*, also prefers nouns which have a negative connotation (cf. Bolinger 1972). However, one also finds examples where *sheer* modifies nouns which in fact have positive connotations, as illustrated in (80)b-c.
(i) *sheer acceptance
Sheer can also be used to modify nouns referring to (physical) dimensions, such as *size*, *volume*, *weight (of numbers)* etc.:
(ii) We were overwhelmed by the sheer volume of work.

[292] Source: http://en.wiktionary.org/wiki/

[293] It was noticeable in our searches of the British National Corpus that a lot of the DPs containing the adjective *sheer* are definite. In addition, in many of the examples *sheer* appears within PPs of the type illustrated in (81)a,c, which are equivalent in interpretation to the PP (without the adjective) modified by the corresponding adverb (or by the adverb *purely*): *{sheerly/ purely} by accident*.

[294] Examples (81)b-c are from the British National Corpus.

b. sheer {labour/ personality/ quality of performance/ survival}
c. in sheer play and frolic
d. the sheer task of learning Clifford's speeches...

Pure has a similar distribution. It is compatible with gradable nouns, as illustrated by (82), but it is not restricted to modifying such nouns, as indicated by the acceptability of the examples in (83) which contain non-gradable nouns:

(82) pure {negligence/ bliss/ delight/ genius}

(83) a. pure socialism
b. a pure accident
c. by pure coincidence

It may be concluded from these data that the adjectives *sheer* and *pure* are not degree adjectives.[295] Rather they seem to say that the objects satisfy only and all the criteria for qualifying as N. They are, indeed, compatible with nouns which encode in their meaning properties that are, intuitively, gradable. The interaction of their meaning with that of nouns that denote gradable properties results in an interpretation that may be (mis)taken for a degree one – similarly, in some sense, to what happens when the adjective *real* combines with a gradable noun.

Finally, consider the adjective *perfect*. In its literal use, *perfect* describes an object in terms of (aesthetic or other) perfection, being accomplished etc., as illustrated in (84). By contrast, in (85), the interpretation is different. *A perfect idiot*, for example, is not an individual who is perfect. It is an individual to whom the description *idiot* applies perfectly, an individual in whom all the attributes of the N are clearly present (cf. also Bouchard 2002, Demonte 2008).[296]

(84) a perfect body

(85) a. a perfect idiot
b. perfect {happiness/ idiocy}

The latter type of interpretation is restricted to the prenominal attributive position. In predicate position, this interpretation is not available; only the basic,

[295] The same seems to hold of their adverbial counterparts too: they are not used as degree modifiers (given that they can modify non-gradable adjectives, e.g. *technical*). Their meaning is something like 'only, exclusively, simply'. (Though *sheerly* seems to be less used than the adverbial counterparts of other adjectives considered in this section, examples may be found.)

(i) On a sheerly technical plane, the projections used for the backgrounds were very effective, particularly in the third act, where a sunset faded most convincingly. (1988 October 21, George Grass, "WagnerVision", *Chicago Reader* on http://en.wiktionary.org/wiki/sheerly)

[296] See Sauerland and Stateva (2007) for an analysis of its adverbial counterpart, *perfectly*, as a scalar approximator (i.e. an expression which resets the granularity parameter for the evaluation of the modifiee, in this case to the finest granularity, similarly to expressions like *completely* and *exactly*) which also contains an intensional component, in the sense that an expression like *perfectly dry* makes reference to a desired point of reference (in spite of the existence of examples like *perfectly awful* where perfection cannot be related to desirability).

descriptive interpretation is available, which accounts for the oddness of example (86).

(86) #This idiot is perfect.

Importantly, this interpretation of *perfect* is not restricted to gradable nouns, as suggested by the examples below:

(87) a. a perfect solution
b. a perfect example of...

This may be clearer in the Romance languages, where the prenominal position is unambiguously associated with the relevant, non-intersective interpretation, as illustrated below with examples from Demonte (2008):

(88) a. una perfecta solución [Spanish]
a perfect solution
'a perfect solution'
b. la solución perfecta
the solution perfect
'the perfect solution/ the solution which is perfect'
c. La solución es perfecta.
the solution is perfect
'The solution is perfect'

The example in (88)a denotes something which is perfect as a solution, a solution in all respects, while the examples in (88)b-c are about solutions which belong to the set of perfect objects or acts (cf. Demonte 2008).

We conclude from such data that *perfect* is not limited to modifying gradable nouns and that it is not, therefore, a degree adjective. In examples like (85), (87), (88)a, it is simply a non-intersective adjective whose semantic contribution is to indicate that the object in question fulfils all the criteria for N-hood. In Bouchard's (2002) terms, it applies to the characteristic function (i.e. the property defining the N) and indicates that it is perfectly filled, that it fits perfectly, that all the attributes of the N are clearly present. When it modifies a gradable noun, it may indirectly result in a high degree interpretation, similarly to what we have seen with the adjectives *true* and *real*; but such an interpretation is not obtained by direct manipulation of the gradable structure in the way degree operators give rise to degree readings in the adjectival domain.

This way of understanding *perfect* immediately raises the question of what the status of adjectives like *complete*, *total*, *absolute* etc. is, given that all these adjectives and/or their adverbial counterparts have generally been treated on a par. It is to a brief examination of these adjectives that we turn in the next sub-section.

4.5.2 Complete & co.

In this sub-section we will examine the distribution and interpretation of adjectives such as *complete*, *total*, *absolute*. These adjectives and/ or the corresponding adverbs have been treated in the literature either as maximality modifiers (Kennedy and McNally 2005, Morzycki 2009) or as extreme degree modifiers (Morzycki 2010) or both (Rotstein and Winter 2004, both uses are also noted by Kennedy and McNally 2005). As it turns out, however, the facts do not require an analysis of these adjectives as degree expressions. An alternative analysis, on which they are in fact more similar to *real* and *perfect*, as discussed above, may be envisaged; this view will be sketched in the second part of the section.

Similarly to the adjectives examined before (e.g. *real*, *perfect* etc.), the adjectives *complete*, *total* and *absolute* seem to have two types of uses. On one use they can combine with arbitrary nouns and are descriptive of completeness of the object (mereological or otherwise). Thus, in (89), *complete* is used to describe an object as having all of its parts, while *absolute* means something like 'free of imperfection or relativity or relation to something else'.

(89) a. a complete {set of publications/ description}
b. an absolute measure

By contrast, in (90), the adjectives seem to say something about the extent to which the property denoted by the noun holds of the objects in question, in a parallel way to their adverbial counterparts modifying an adjective (e.g. *completely idiotic*)

(90) a. a complete idiot
b. a total mess

The nouns in (90) are nouns which encode gradable properties in their meaning. More examples of this type are given in (91).

(91) a. a {complete/ total/ absolute/ utter} {idiot/ dork/ stranger}
b. (a) {total/ complete/ absolute/ utter} {mess/ chaos/ mayhem/ disgrace/ nonsense/ joy/ confidence/ bliss}

The examples in (92) show that certain gradable nouns (e.g. nouns derived from activity verbs like *eater*, *smoker* etc., as well as other gradable nouns, such as *fan*, *enthusiast* etc.) resist modification by these adjectives:[297]

(92) #a {complete/ utter} {cheese eater/ smoker/ jazz enthusiast/ fan of curling}

There are two directions to go in search for an explanation of this difference, which reflect the two types of proposals that have been made in the literature analysing these adjectives and/ or their adverbial counterparts as degree expressions. One possible view is that they are maximality modifiers, which can only modify

[297] Some of these examples are taken from Morzycki (2009, 2011).

expressions associated with scales that are upper closed and have a maximum standard (Hay, Kennedy and Levin 1999, Kennedy and McNally 2005). The other one is that they express very high degree (Rotstein and Winter 2004, Kennedy and McNally 2005) and are only compatible with expressions that encode a notion of extremeness in their meaning (Morzycki 2010). In what follows we will examine each option in turn.

A maximality interpretation seems to be at work in examples like (93)-(94), as also indicated by the possibility of replacing these adjectives by maximality modifiers like *full* and *100%*. The unacceptability of some of the examples in (93) and those in (94) would then be due to the impossibility of assigning a maximum bound to the respective properties.[298]

(93) a. {complete/ total/ full} {certainty/ *uncertainty}
b. {complete/ 100%} {purity/ *impurity}
c. complete {visibility/ invisibility}

(94) a. *{full/ complete/ total} {patience/ impatience}
b. *{complete/ 100%} {strength/ weakness}

This is confirmed by the availability of modification by the adverb *almost*, as illustrated in (96). *Almost* can typically modify expressions associated with upper-closed scales and an absolute maximum standard (including maximality degree modifiers in the adjectival domain such as *completely*), as illustrated in (95) (cf. Paradis 2001, Rotstein and Winter 2004, Kennedy and McNally 2005).[299] The same maximality interpretation is also indicated by the availability of modification by exception phrases in (97):[300]

(95) a. This rod is almost straight.
b. It was almost completely dark .

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[298] The nominal data in (93) seems to replicate the pattern found in the adjectival domain. Kennedy and McNally (2005) show that maximality modifiers (*100%*, *completely*, *fully*) are acceptable with positive adjectives only if they use a scale with a *maximal* element, and with negative adjectives only if they use a scale with a *minimal* element:

(i) Open scale pattern
a. ??completely {tall/ deep/ expensive}
b. ??completely {short/ shallow/ inexpensive}
(ii) Lower closed scale pattern
a. ??completely {bent/ wet}
b. completely {straight/ dry}
(iii) Upper closed scale pattern
a. completely {certain/ safe/ pure}
b. ??completely {uncertain/ dangerous/ impure}
(iv) Closed scale pattern
a. completely {full/ visible}
b. completely {empty/ invisible}

[299] The same holds of the literal use of the adjectives:

(i) The library is fortunate to have an almost complete set of these publications. (http://www.macmillandictionary.com/dictionary/british/complete)

[300] The examples in (97) are from the Corpus of Contemporary American English.

(96) a. almost complete {certainty/ invisibility}
b. almost utter {darkness/ futility}

(97) a. Then silence. Utter, complete silence except for the ticking of the mantel clock counting down the seconds that were left in her life.
b. Electricity and lights are fed down to the men, who have lived in utter darkness, except for occasional use of their helmet lamps.

Such modification is, however, not acceptable in all the cases where *complete* is used (cf. the examples in (90) above):

(98) ??an almost {complete/ utter} idiot

This would be puzzling on the view that here too *complete* would mark maximality and *idiot* would be associated with an upper-closed scale. In addition, application of other tests that indicate whether an expression is associated with an upper-closed scale and has a maximum standard yields negative results with nouns like *idiot*. For example, Kennedy and McNally (2005) show that an assertion of *x is A* entails that *x* has a maximal amount of *A*-ness, i.e. that nothing can be more *A* than *x*. This explains the contradictions illustrated in (99). Unlike the sentences in (99), however, the one in (100), with the noun *idiot*, is not contradictory:

(99) a. #The paper is complete. I just have to write the conclusion.
b. #The plant is dead, though one part of it still appears to be alive.

(100) John's an idiot, though he's quite smart when it comes to computers.

Another test consists of entailment patterns in comparatives: the comparative of a maximum-standard adjective generates a negative entailment to the unmarked form, as illustrated in (101), where the sentence in (a) entails the one in (b). By contrast, the sentence in (102)a, where *idiot* is used inside of a comparative structure, does not entail the one in (102)b.

(101) a. The floor is drier than the countertop. →
b. The countertop is not dry.

(102) a. John is {more of an idiot/ a bigger idiot} than George.
b. George is not an idiot.

A final test, meant to determine the type of absolute standard (minimum or maximum) is based on the entailment patterns obtained when proportional modifiers are used: if the adjective has a maximum standard, these entail *X is not adj*, as in (103), while if the adjective has a minimum standard, then it is entailed that *X is adj*, as in (104). If this test is applied to a noun like *idiot* (to the extent to which it accepts proportional modifiers), it again does not pattern with maximum-standard expressions: the sentence in (105)a does not entail the negative sentence in (105)b.

(103) a. The glass is partially full. →
b. The glass is not full.

(104) a. The door is half open. →
b. The door is open.

(105) a. John is {partially/ somewhat (of)} an idiot.
b. John is not an idiot.

In sum, *idiot* does not pattern with expressions associated with upper-closed scales that have maximum standards.

There is, however, an alternative to interpreting the use of *complete* in examples like (90)-(91), namely to take it as the adjectival counterpart of the high degree modifier use of *totally* and *completely* illustrated in (106) (cf. Rotstein and Winter 2004, Kennedy and McNally 2005, Morzycki 2010):[301]

(106) I'm totally intrigued by bowling.

Kennedy and McNally show that the true maximality use and the high degree use (similar to *very* or *extremely*) are distinguished by their entailments. A maximality use entails that the end of the scale has been reached, as shown by the fact that (107)a is a contradiction, while the non-maximality, high degree use carries no such entailment, hence the acceptable continuation of (107)b:

(107) a. #The line is totally straight, though you can make it straighter.
b. I'm totally intrigued by bowling, and Kim is even more intrigued by it than I am.

If this test is applied to the cases of adjectival modification of nouns, the result is similar to (107)b rather than (107)a: the sentence in (108) is not contradictory. In other words, modification by *complete* in these cases patterns with the high degree use of its adverbial counterpart, rather than with a maximality use.

(108) John is a {complete/ total} idiot, {but/ and} Bill is even more of an idiot!

This also means that the difference in acceptability between the examples in (91) and (92) cannot be attributed to a difference in scale structure, namely there would be no maximum on the scale associated with *smoker*, but that there would be one on the scale of *idiot*.

In §2.3 it was suggested that nouns which categorize individuals based on a gradable property already encode high degree in their meaning. What the availability of modification by adjectives like *complete* may now be taken to further indicate is that nouns like *idiot*, unlike nouns such as *eater* or *fan*, encode very high degree, or

[301] Kennedy and McNally (2005) suggest that this use might have originated in a hyperbole or metaphor based on something that was originally literally interpreted along the lines of 'all of me is intrigued by bowling', for example.

'extremeness', in their meaning.[302,303] They would thus be similar to the so-called 'extreme' adjectives already mentioned in §2.1 and §3.1 (e.g. *fantastic*, *wonderful*, *fabulous*, *gorgeous*, *tremendous*, *huge*, *gigantic*, *enormous*, *minute*, *tiny* etc.) (cf. Cruse 1986, Paradis 2001, Morzycki 2010). Someone would qualify as an idiot if s/he shows a very high degree of stupidity, not just a minimal lack of intelligence. Interestingly, in fact, Morzycki (2010) includes the corresponding adjective, *idiotic*, in the class of lexically extreme adjectives. One of the characteristics of this class of adjectives that has been highlighted in the literature is precisely that they can be modified by totality modifiers like *absolutely*, *totally* etc. (Cruse 1986, Paradis 2001, Morzycki 2010), as well as by other 'extreme' degree modifiers like *simply*, *positively*, *flat-out*, *downright*, *outright* etc. (Morzycki 2010). It is therefore not unexpected that nouns like *idiot* would be compatible with the corresponding adjectives: these nouns would be 'extreme' gradable nouns and the adjectives would be the adnominal counterparts of extreme degree modifiers. Other extreme degree modifiers can also modify nouns like *idiot*, as observed by Morzycki (2010), which strengthens the parallel between such nouns and extreme adjectives.

(109) Clyde is a {flat-out/ downright/ full-on/ straight-up} idiot.

In sum, the adjectives *complete*, *total* etc. seem to behave in quite a parallel way to their adverbial counterparts in terms of the interpretations available and the types of expressions they may modify.[304] Does this mean that they should be analysed as degree expressions? This is the view put forth by Morzycki (2009) who analyses them as degree heads (similarly to how he analyses *real* – cf. discussion in §4.1 and §4.4).[305] We would like to suggest that this is not a necessary conclusion. An alternative account, more similar in nature to the approach taken in previous sections to adjectives like *real* and *perfect*, may be available.

In order to get a better understanding of these adjectives, we should also examine their syntactic distribution and compare their attributive and predicative uses.

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[302] Paradis (2000) also notes that gradable nouns "tend to be hyperbolic".

[303] Similar variation is found in the adjectival domain – cf. Bierwisch (1989) who makes a distinction between dimensional gradable adjectives such as *tall* and evaluative adjectives, of which extreme adjectives are in fact a sub-class. Evaluative adjectives, for instance, generally resists neutralization (unlike dimensional adjectives), but there is, in addition, a lot of variation among different lexical items or sub-classes of adjectives.

[304] Note also that while Kennedy and McNally (2005) take the two uses of the corresponding adverbs as distinct, other works propose unified analyses for the two and derive the differences from the interaction with the (scalar) properties of the modified elements (cf. Rotstein and Winter 2004, Morzycki 2010).

[305] Morzycki's (2009) analysis is set within a degree-based approach to gradability. But an analysis of *complete* as a degree expression could also be implemented in a degree-less approach. The question that would arise on such an approach, if it is accepted that these modifiers are sensitive to scale structure (at least on some of their uses), is how to capture the scalar properties of expressions, more precisely the absolute ones. This is a criticism that has been raised more generally against degree-less approaches to gradability (see e.g. Kennedy 2007a). Suggestions have been made, however, in the literature of how this can be captured. Wheeler (1972), for example suggests that for absolute adjectives the comparison class is everything. McNally (2011) suggests a characterization of the relative/absolute distinction focusing on the nature of the properties that adjectives contribute, the role that adjectives play in classifying individuals according to their manifestation of these properties, and the strategies for classification that may be involved (namely classification by similarity, and classification by rule). Such a view could be made use of within a degree-less approach to gradability.

Complete-type adjectives seem to be restricted to the prenominal attributive position, on the relevant reading. In the predicate position, only their basic, descriptive meaning is available, if one exists, hence the results are more or less odd or plainly ungrammatical (cf. Bouchard 1998, 2002, Demonte 2008, Morzycki 2009 a.o.):

(110) a. a complete set of publications
b. The set was complete.

(111) a. a {complete/ absolute/ total/ utter} idiot
b. That idiot {is/ seems} {complete/ #absolute/ #total/ *utter}.

Analysing them as degree expressions, whether on a degree-based or on a degree-less approach, predicts this type of syntactic behaviour. On a degree-based approach, they need to operate on expressions defined in terms of degree arguments, and these will not be available when the adjective is used predicatively. In addition, they are linked to a particular projection within the DP; therefore they must appear in a prenominal configuration (cf. Morzycki 2009 who analyses them as degree heads just like *real*). Similarly, on a degree-less approach, these elements will be treated as degree functions that need to apply to the noun and operate on the ordering encoded in its meaning, hence they will be restricted to the prenominal attributive position. But, as discussed in §2.2.3, the restriction to the prenominal position is more generally characteristic of non-intersective adjectives, and cannot be taken as a solid argument in favour of analysing these elements as degree expressions. At any rate, the discussion of the syntactic distribution here will be focused on finding more clues as to the interpretation of these adjectives and their interaction with nouns, which may already suggest an alternative account, rather than directly arguing against a degree analysis.

In contrast with (111), examples like the following, where a noun intuitively associated with an upper-closed scale is used (cf. the examples in (96)-(97) above), are both acceptable and do not seem to exhibit a difference in interpretation:

(112) a. complete certainty
a'. utter silence
b. My certainty was complete.
b' The silence was utter.[306]

There are two possible ways of interpreting these data. One would be to say that, if these examples contain the normally exclusively prenominal adjective illustrated in (111), then this shows that it may be used predicatively, on the relevant interpretation, if the right sort of noun is used as a subject. The other option would be to take it to suggest that it is in fact the literal completeness adjective (cf. (110)) that is used in both cases, namely (112)a-a' and (112)b-b'. In other words, the maximality modifier (e.g. (96)-(97), (112)) would in fact be the same as the descriptive adjective which denotes completeness and which can also be used

[306] Source: Corpus of Contemporary American English

predicatively in other cases (e.g. (110)), but, similarly to what we have seen with size adjectives, due to the nature of the noun it would result in an abstract interpretation. In order to decide, we will also look at the behaviour of *complete* in combination with other nouns (e.g. nouns that also allowed the predicative use of size adjectives). This seems to support the second type of account of (112).

A comparison of the prenominal and predicative use of these adjectives with nouns that denote non-human objects characterized by a property turns out to be quite revealing. Consider the following examples:

(113) a. The workshop was a complete failure.
b. The failure was complete.

The success or failure of a workshop may depend on multiple aspects such as the quality of the talks, the atmosphere, the contacts established, the quality of the organisation etc. If the workshop fails in any of these respects that the speaker considers most important, then a sentence like (113)a may be felicitously uttered. In other words, that would be salient enough an indication that the situation qualifies as a failure; it would be sufficient for it to be a clear case of failure in the speaker's view. This may also be why speakers often report that this is in fact an "exaggeration". In contrast, sentence (113)b requires the workshop to have failed in all respects and is used with more difficulty in a "partial" scenario. In other words the predicative *complete* predicates literal completeness with reference to the mereological structure (component parts or aspects) of the object which is being described as a failure. Therefore, if *the failure is complete*, that means that it is a subset of 'complete things' in the sense that it is something which has failed in all respects, all of its aspects has been afflicted, while *a complete failure* is complete as a failure (cf. also Demonte 2008), i.e. it fulfils all the criteria for qualifying as a failure.[307,308]

This is the interpretation we would like to propose the exclusively prenominal *complete* always contributes. Like *perfect*, then, *complete* would apply to the

[307] This difference in interpretation seems to be confirmed by examples like the following (from the British National Corpus), where abstract nouns are used as subjects. Consider (i)b, for instance, where it is clear that even the last thing went wrong and this made the situation be miserable in all respects.

(i) a. My Christmas happiness was complete.
b. But Roper was the only Ballyshannon attacker to get his name on the score sheet, and when he failed to tie the game up with that late penalty the misery was complete for De La Salle.
c Clouds shut out the stars; their solitude was complete.

[308] The contrast may be illustrated more clearly in Romance languages where the non-intersective interpretation is more strictly restricted to its prenominal position, while the postnominal and predicative positions exhibit the intersective, literal interpretation of the adjective. This is shown below for Spanish (examples from Demonte 2008):

(i) a. un completo fracaso
a complete failure
'a complete failure'
b. El fracaso es completo.
the failure is complete
'The failure is complete.'

a'. el total desacuerdo [Spanish]
the total disagreement
'the total disagreement'
b'. El desacuerdo es total.
the disagreement is total
'The disagreement is complete.'

Thus, if the disagreement is complete, as in (i)b', then they disagree in all respects, while *el total desacuerdo* denotes an act of disagreeing which is such that it represents a clear case of disagreement (Demonte 2008:83).

characterizing property included in the meaning of the noun, and it would say that the properties displayed by the individual in question match this definition. This also correlates with its restriction to the prenominal position: it is only in this configuration that it can target this internal component of meaning of the noun (i.e. the characteristic function, cf. Bouchard 2002, but also, though in a different framework, Siegel 1976 etc.), and indicate that the criteria defining it are exhaustively satisfied in the speaker's opinion. The "speaker-oriented" *complete*-type adjectives are, therefore, parallel to adjectives like *real* and *perfect*, as analysed in the preceding sections. In what follows we will sketch this view and and show how it can account for the distribution and interpretation of these adjectives.

Note first that "all the criteria" should not be taken literally. Consider again nouns like *failure*, *idiot* etc. Such nouns denote objects or individuals characterized by a property that is multi-dimensional (cf. Sassoon 2007a for relevant discussion of multi-dimensionality).[309] Adjectives like *complete*, on the relevant interpretation, say that, in the speaker's view, this (complex) characterizing property applies; this makes it similar to adjectives like *real*. However, it is not necessary that the object actually satisfy the property in absolutely all respects. In other words, these adjectives are not maximality (or exhaustivity) operators over the sets of dimensions or criteria that make up the property included in the meaning of the noun. Let us briefly review the arguments in favour of this view. First of all, the discussion of (113)a above has shown that it may be enough if the characterizing property is clearly manifested in a way or aspect that is particularly salient contextually or in an aspect that is most important to the speaker (e.g. popularity or quality of talks for a workshop in the case of *complete failure*). That seems to offer a sufficient basis for the speaker to conclude that s/he is dealing with a case that fully matches the definition of N (e.g. *a failure*). Secondly, this view of the speaker-oriented *complete* is also supported by the non-contradictoriness of examples like *John's a total idiot, though he's quite smart when it comes to computers*.[310] Finally, *complete* cannot be modified by

[309] The presence of a multi-dimensional property may in fact be a condition on the use of *complete*, and this might explain the difference in acceptability between *a complete idiot* and **a complete smoker*. In the latter case, what makes someone a smoker is simply the quantity of smoking, and under these circumstances the application of *complete* does not make sense.

[310] It should be noted that proportional modifiers are not very natural or common with the noun *idiot*, as might be expected if we were dealing with a closed scale that made it compatible with *complete*. When found such modifiers seem to be rather the result of a play upon words, taking advantage of the availability of modification by *complete* and the actual totality use of *complete* (on which it would form a series with proportional modifiers like *half*), or maybe (in some cases) retaining the closed scale that was associated with *idiot* in its initial (now obsolete) use to refer to someone with psychological disabilities. Some examples are given in (i). Note also that *a half idiot* is not 'half as idiotic' as compared to 'a complete idiot'; nor is it necessarily someone who is less idiotic than *a complete idiot*, as suggested by (ii). This also confirms our proposal that the speaker-oriented *complete* is not a maximality (or exhaustivity) operator over the dimensions that make up the characterizing property.

(i) a. He's not a complete idiot, but only a half idiot. (http://forums.mangafox.com/threads/Character-Discussion-Thread?p=2953100)
b. He has been variously described as dim-witted, coarse and ignorant, a half idiot, a madman, and a lunatic. (http://en.wikipedia.org/wiki/Hon_Yost_Schuyler)

(ii) a. I wonder, is a half idiot worse than a regular idiot? No, really. Think about it. (http://www.csharphelp.com/forum/topic/breaking-thru-to-sharp)
b. A: Hey Dr. Chipmunk, when you call Mr. Lincoln a "half idiot" what do you mean? B: I mean he is so stupid that he fails to qualify as a full fledged idiot, or in other words, he would have to get smarter to be an "idiot". (http://www.wordnik.com/words/)

almost in these examples. We will conclude, therefore, that for a *complete N* to hold, on the relevant interpretation, the characterizing property must be exhibited saliently enough for the speaker to conclude that that the individual in question fully qualifies as an N. So these adjectives are quite strongly speaker-dependent, similarly to what we have seen with *real*.[311]

The literal completeness adjectives, on the other hand, which may also occur predicatively, do impose an actual completeness requirement. When the adjective is predicated of a concrete object with clear, concrete parts (e.g. *set*, *description*, *collection* etc., but also a noun like *idiot*, which denotes a [+human] individual with body parts), the interpretation is in terms of it having all of its mereological parts – e.g. (89), (110), and the only possible, though odd, reading of (111)b. When it is predicated of a more abstract noun, either a noun denoting a property (e.g. *misery*) or one denoting an (abstract) object characterized by a property (e.g. *failure*), this translates as the object satisfying the property in all its aspects. For example, if *the failure is complete* then the failure must cover all of the aspects of the object referred to (e.g. the parts or aspects of a workshop all need to have failed). When the adjective is applied to an expression that inherently involves a finite set of strict criteria for application (cf. McNally 2011 for this view of absolute adjectives, which may be extended to nouns that are intuitively associated with an upper-closed scale), this will result in the maximality interpretation – e.g. (96), (97) and (112).[312] In all these cases, *complete* may be modified by *almost* and by exception phrases.

This view of the "speaker-oriented" adjectives of the *complete* family, which makes them more similar to *perfect* and *real*, may also help us understand their possible co-occurrence with epithets:[313] in the speaker's view the individuals in question satisfy all the necessary criteria for qualifying as Ns (here, again, what is necessary and sufficient to qualify as such is relative to the speaker's belief world).[314]

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[311] Just as in the case of *real* and evaluative adjectives, we should probably refer to an agent or a judge (in the sense of Lasersohn 2005), rather than necessarily the actual speaker, given that these expressions can, for example, be embedded, and so allow shifts in perspective.

[312] Note that *utter* does not seem to be able to modify nouns denoting concrete objects and result in a concrete maximality/ completeness interpretation of the type found with *complete* in examples like (89), (110), and (111)b, on the only possible, though odd, reading of this example. *Utter* seems, therefore, to have lost its original literal meaning, which was descriptive of outermost locations in space (cf. Bolinger 1972), and to have only retained an abstract aspect of the meaning in terms of 'reaching the (far) end, i.e. maximum'. This may explain why it seems to be restricted to nouns denoting abstractions. Otherwise, however, it displays the same patterns of distribution and interpretation as the adjective *complete*, as already illustrated at various points in this sub-section. This includes the maximality interpretation (which correlates with the availability of modification by *almost* and exception phrases, and with the possible occurrence in predicate position); the only peculiarity is that it is generally only found with rather abstract nouns – e.g. (97) and (112); other examples of this type include *(an) utter absence/ lack/ stillness/ loss/ isolation/ blackness/ solitude/ transformation* etc.

[313] Differently from *real*, *complete* does not seem to be compatible with figurative, stereotypical interpretations of nouns, but is rather limited to their literal interpretations, though it can also modify epithets – but it is rather the conventionalized ones (e.g. *bitch*, *crap*) (cf. relevant discussion in §2.1).

[314] The adjective *utter* seems to display a preference for nouns that have a negative connotation, as shown by the unacceptability of (i), in contrast with (90) above, as well as with examples such as (114), where *garbage* and *rubbish* are used to convey a clearly negative evaluation, rather than (simply) attributing a gradable property.

(i) ??an utter genius

However, examples can also be found where *utter* modifies nouns with neutral or positive connotations (example (ii)a is from The British National Corpus, (ii)b is from Paradis (2000), and (ii)c-d were found

(114) a. {total/ complete/ utter} {garbage/ rubbish/ crap}
b. a complete bitch

In sum, it has been proposed in this sub-section that the "speaker-oriented" *complete* need not be analysed as an adnominal degree expression. Instead, its contribution seems to be similar to that of adjectives like *perfect* or *real*, in the sense that it applies to the property defining N and indicates that it is fully satisfied by the individual in question in the speaker's opinion. As discussed above, this does not mean that the object described has to manifest the property in absolutely all respects, or in all of its aspects; the object needs to display the defining property saliently enough for the speaker to be able to judge it as clearly qualifying as an N.

4.6 Concluding remarks

This section has studied a number of adjectives which have been argued to be adnominal degree expressions (cf. Morzycki 2009 for an explicit analysis of *real*, *complete* etc. as adnominal degree morphemes). It has been shown here, however, that *real* is in fact not a degree operator, but is best treated as an epistemic/ evidential adjective. A similar analysis can be extended to adjectives like *sheer* and *perfect*. As for totality adjectives like *complete*, it has been shown that they may also be given an alternative analysis, on which they do not directly manipulate gradable structures but are treated more similarly to *real* and *perfect.* The main consequence of this section is that the evidence for adnominal degree morphemes has been shown to become even more scarce, and that availability of modification by these adjectives is excluded as a test for gradability.

5 Conclusions

In this chapter we have examined a number of adjectival modifiers which had been argued to be degree modifiers or operators in the nominal domain. The result we have arrived at after these several case studies is that, in fact, they provide no clear

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on the internet):

(ii) a. It is an utter delight all the way, especially for travellers on foot with time to linger, but perhaps not for nervous motorists.
b. complete and utter joy
c. Now this is utter genius!
d. utter perfection
e. an utter mystery

Note that the modified nouns tend to be [-human], abstract mass nouns – compare, in particular, (ii)c to (i) above. A count use is, however, also possible, as in (i)a.

Paradis (2000) remarks that in the majority of cases the other adjectives also co-occur with negative nouns (in her BNC-based corpus study), but they are not restricted to such environments, as also apparent from the examples in (90) above.

evidence in favour of an explicit gradable structure in the semantics or syntax of nouns that would be parallel to that of adjectives.

First of all, these modifiers are not (always) restricted to what one would want to call gradable nouns, which indicates they do not depend on gradability. Secondly, although the interpretations obtained are often very similar to those obtained in the adjectival domain by means of degree modification, they are in fact arrived at by different mechanisms. In the case of size adjectives, it was shown that they are always used as modifiers predicating size. When they combine with nouns that denote or are defined in terms of instances of abstract properties, due to the type of object they measure, they give rise to an abstract size interpretation. This mimics a degree interpretation, though it is arrived at in a different way, without the manipulation of a gradable structure. In the case of evaluative adjectives, it was shown that the degree(-like) interpretation may may simply arise as an implicature, as an effect of reinforcing negative connotations of nouns. Adjectives like *real* and *true* were probably the clearest cases where a degree analysis could not apply. They have been analysed here as epistemic/ evidential adjectives; in their case the apparent degree interpretation obtained is a result of the interaction between the evidential adjective and the nouns that contain a gradable property in their meaning such as *idiot*. This is because the more idiotic one is, the less doubt there will be about the individual qualifying as an idiot. A similar approach was suggested for adjectives like *pure*, *perfect* and even *complete*. All of these, therefore, turn out to be 'fake degree modifiers'. They may give rise to degree-like interpretations; however, these are arrived at by various other mechanisms, which are in fact independently needed, without the direct manipulation of a gradable structure. Such a gradable structure does not seem to be grammatically accessible to adjectival modifiers. In chapter 5, we will discuss the implications of these findings for the status of nouns and the status of gradability in the nominal domain, for the parallel or lack thereof with the adjectival domain, as well as for the representation of gradability more generally.

To conclude, the investigation in this chapter provides no evidence for the presence of gradable structure in the semantics and syntax of nouns. Even if in certain contexts, they may give rise to particular interpretations that resemble interpretations obtained by means of degree modifications in the adjectival domain, these are arrived at through different mechanisms. If one were to take these as an indication of the 'gradable' status of the nouns in the context of which such interpretations are obtained, then what gradability means for nouns seems to be different from gradability in the adjectival domain. This conclusion only comes to confirm the results yielded by the previous two chapters.

Chapter 5 CONCLUSIONS

This dissertation started out with the aim of identifying gradability in the nominal domain. In order to do that, a number of tests were gathered that had been proposed in the literature at some point or other. From an overview in chapter 1, section 2, it appeared that different tests yielded different results, which begged for a more in-depth investigation. This investigation was carried out in chapters 2-4, each of which has re-examined various environments that had been claimed to involve gradability in some way or another. In case after case, however, it turned out that the proposed diagnostics did not work in the expected ways, and that other factors were involved in creating the noted effects. In the end, we are left with a rather meagre picture of gradability and degree modification in the nominal domain, which is not parallel to what is found in the adjectival domain. In this concluding chapter we will summarise the results of the "tests" which have been examined (and re-analysed) and which have turned out to instantiate phenomena that are different from degree modification as we know it from the adjectival domain. We will also present the picture of "gradable nouns" that emerges from this investigation. Finally, we will discuss the implications this has for our understanding of gradability more generally, and specifically for the comparison between the nominal and adjectival domains. Although the examination of gradability in the nominal domain leads to a negative conclusion, not giving direct evidence that would provide a basis for choosing between theories for the representation of gradability, we will end with some speculations as to which approach might be best suited to capture the differences between nouns and adjectives with respect to gradability.

In chapter 2 two environments were examined that have been claimed to involve gradability, namely *N of an N* constructions (e.g. *that idiot of a doctor*) and the small clause complement of *seem* (e.g. *He seems a fool.*). It was argued that that the distribution of nouns in these contexts is not determined by gradability – whether at the lexical or syntactic level – but by other factors which partly overlap with gradability and, under certain circumstances, create similar effects. In the case of *N of an N* constructions, it was shown that the necessary and sufficient condition for a noun to occur in the first slot of the structure is that it can express a value judgment. It was shown that gradable expressions and expressions that convey a value judgment constitute two distinct categories, though they may overlap to some extent, and that the strength of appreciation/ depreciation may lead to an interpretation that can be mistaken for a degree interpretation. In the second case, it was argued that *seem* is an epistemic verb that contains an evidential meaning component. The

restrictions on its small clause complement were shown to follow from a combination of two factors. One is the necessary compatibility with the uncertainty of assessment involved in the meaning of the verb. The other consists of certain restrictions as to what may be used as evidence based on which it can be evaluated whether a property holds. Gradable expressions were seen to represent only a subset of expressions that may occur in this environment. They generally make good complements given the vagueness they introduce. However, this is not enough, and it was seen that not all gradable expressions can occur in the small clause complement of *seem*. Consequently, these two environments were excluded as tests for gradability. The distribution of nouns in these contexts cannot be used as evidence in favour of positing a gradable structure in their semantics or of a degree projection in their syntax. The two case studies examined in this chapter have also shown how various factors may conspire so as to create the impression that gradability and degree are involved.

Chapter 3 focused on the study of *such*, for which a fundamental distinction had been proposed in the literature between a "kind" *such* and a "degree" *such*. We argued against this view and showed that the so-called "degree" *such* is not a degree operator. Its distribution is not limited to gradable nouns, nor is the interpretation in terms of degree. It was proposed instead that this *such* (which we labelled "internal" *such* so as to distinguish it from the usual anaphoric and deictic uses of the "kind" *such*) is also a case of a kind-referring expression, but that it imposes particular requirements concerning the construal of sub-kinds it can select, which accounts for the differences in distribution (and interpretation) with respect to the regular "kind" *such*. More precisely, it was argued that it selects salient sub-types that can be identified by natural consequences which are expressible by means of result clauses. Once again, nouns that are generally thought to be gradable turned out to be only a subset of the nouns that make available the required sort of sub-types, as they easily prompt sub-types delineated by a high degree of the property included in their meaning (e.g. "big idiot"-type) and which are associated with natural consequences that identify them (e.g. being a sub-type of idiot as defined by a high degree of idiocy can naturally determine one's chances of being hired, hence the acceptability of an example like *He's such an idiot that no one will hire him*.). In addition to gradable nouns, internal *such* can modify nouns used with a stereotypical (possibly figurative) interpretation and *situation*-type nouns. While in the case of nouns like *situation*, *way* etc. it is rather straightforward that they are non-gradable nouns, we also argued in this chapter that stereotypical nouns are not gradable either (whether inherently or by coercion). Consequently, it turned out that co-occurrence with *such* in exclamatives or with result clauses is not a test for gradability either, and cannot be used as evidence in favour of the existence of gradable structures in the semantics and/or syntax of nouns. It does not rule out, however, that some nouns may be associated with such gradable structures in the semantics, given that some effects are seen in the interpretation, namely in the way salient sub-types are made available by nouns like *idiot*, *courage* etc. In the last part of the chapter we briefly examined some related cases. W*h*-exclamatives were shown not to offer a solid basis for distinguishing between lexically gradable and non-gradable nouns, while for *quite*-structures it was suggested that they need not be analysed as degree constructions at

all. An interesting case was presented by predicative partitive structures (e.g. *more of an idiot*), for which it turned out that they may well involve operations on orderings – interestingly enough, these are only available out of an indefinite NP predicate and may be understood in terms of typicality dimensions (in the sense of Sassoon 2007a,b).

Chapter 4 focused on a number of "degree adjectives". From the overview in section 2 of chapter 1, it appeared that the availability of modification by these adjectives on the relevant reading offered the most reliable test for gradability and the most promising candidates for adnominal degree expressions. However, the more detailed investigation of size adjectives, *real*-type adjectives and evaluative adjectives ended up disconfirming this hypothesis. The distribution and the interpretation of size adjectives, for example, do not support a degree analysis of these expressions. The facts instead support an alternative account in terms of (abstract) size of (instances of) properties. More precisely, it was shown that when they combine with nouns that denote or are defined in terms of instances of abstract properties (e.g. *big idiot*, *enormous generosity*, *huge blunder*), due to the type of object they measure (namely an instance of a property, or trope), they give rise to an abstract size interpretation. This mimics a degree interpretation, but we argued that it is arrived at in a different way, without the manipulation of a gradable structure that would be parallel to that of gradable adjectives. Interestingly, *big idiots* would correspond to a salient sub-type that internal *such* was seen to select in chapter 3; it now appears that to arrive at the relevant interpretation, manipulation of gradable structure is not needed. *Real*-type adjectives were a clear case of adjectives that can be shown not to be adnominal degree operators. *Real* and *true* were argued to be epistemic/ evidential adjectives. The apparent degree interpretation obtained was shown to be a result of the interaction between the evidential meaning of the adjective and the nouns that contain a gradable property in their meaning, such as *idiot*: intuitively, the more idiotic one is, the less doubt there will be about the individual qualifying as an idiot. A similar approach was suggested for adjectives like *pure*, *perfect* and even *complete*. As for evaluative adjectives, it also seems that they do not require a degree analysis. An alternative, non-degree account is possible, namely one which capitalizes on their evaluative meaning, and derives the degree-like interpretation as an implicature, an effect of reinforcing the negative connotation of nouns. In sum, although the interpretations obtained are often very similar to those obtained in the adjectival domain by means of degree modification, they are in fact arrived at not by operating on gradable structures in a way that would be similar to how degree modification applies to gradable adjectives, but by different mechanisms, which are independently attested and needed to account for other phenomena as well. The behaviour of "degree adjectives", therefore, turned out not to provide any conclusive evidence either in favour of the existence of gradable structure in the semantics or syntax of nouns that would be parallel to that of adjectives.

The investigation carried out in chapters 2-4 shows that in the nominal domain there are no grammatical phenomena that are exclusively sensitive to gradability and no expressions that perform the type of operations that are involved in degree modification as we know it from the adjectival domain, i.e. involving comparison of

degrees or operations on ordered sets (depending on the approach). In the nominal domain, we have not found expressions that are strictly restricted to co-occurring with a particular class of nouns, that one might want to call gradable, and where the degree-like interpretation is not brought about by different mechanisms. It has been shown that abstract size modification, for instance, offers a way of obtaining interpretations that mimic degree interpretations in the nominal domain. In other cases, a degree-like interpretation may arise as an effect of an evidential meaning, or comes about as an implicature arising from reinforcing evaluative connotations, or is mimicked by value judgmental expressions. Various environments or phenomena seem to interact with gradability, at least intuitively, such as epistemicity and evidentiality (cf. the case of the epistemic verb *seem* as well as *real*-type adjectives) or the delineation of sub-kinds. The latter was seen with internal *such* which makes use of salient sub-types (defined by natural consequences) that, in some cases, are delineated in a way that seems to make use of gradable structure, while in fact they are just the sort of sub-types that happen to be salient with this kind of nouns.

We have also not found any evidence in favour of the existence of adnominal degree heads or, more in general, of a syntactic projection dedicated to degree modification, i.e. a nominal DegP, parallel to what has been proposed for the adjectival domain. Take for example those elements that Morzycki (2009) argues to be degree heads and on the basis of which he argues in favour of the existence of a nominal degree structure: *real*, *true*, *complete*. On the one hand, these have been shown not to be degree operators. On the other hand, even if a degree analysis of these elements could be somehow accepted, there would still be a lack of parallel with the adjectival domain: their adverbial counterparts (as well as those of other adjectives, such as *terribly* etc.) behave syntactically as adjuncts, rather than as heads, in the adjectival domain (as indicated by e.g. extraction, adjacency, non-interference with head-movement etc. – cf. Doetjes 1997, Neeleman, van de Koot and Doetjes 2004).[315] As a result, it is not possible to maintain that the same items are involved, which may attach either to adjectives or to nouns (and which, function of the specific syntactic context may be spelled out slightly differently, i.e. *complete/ terrible* etc. vs. *completely/ terribly* etc., or without any morphological difference, as is the case of Dutch: *erg* 'terrible/y'). While in the adjectival domain items are found which function quite clearly as Deg heads syntactically, such as the comparative, superlative, equative morphemes etc. (cf. Corver 1997, Doetjes 1997, Neeleman, van de Koot and Doetjes 2004, Doetjes 2008 a.o.), we have not found evidence in favour of degree morphemes in the nominal domain. Reflexes of the existence of a nominal DegP structure cannot be found elsewhere either. In chapter 2, it was argued that the distribution of expressions in the small clause complement

[315] This is illustrated below with two Dutch examples, since the possible positioning of the complement to the left of the adjective enables us to check for the possibilities in placing the degree words with respect to the adjective. The example in (i.a) illustrates the impossibility of separating the degree heads *te* 'too' or *even* 'as' from the adjective, while (i.b) shows that this is possible when the modifier/ adjunct *erg* 'terrible/y' is used.

(i) a. *een {te/ even} van zijn moeder afhankelijke jongen
a too/ as of his mother dependent boy
b. een erg van zijn moeder afhankelijke jongen
a terribly of his mother dependent boy
'a boy terribly dependent on his mother'

of the verb *seem* is not determined by gradability – either at the lexical or syntactic level. Hence, the possible occurrence of a nominal expression in this environment cannot be taken as evidence in favour of the existence of a nominal DegP either (contra Matushansky 2002c). In sum, there is no evidence in favour of adnominal degree morphemes, i.e. of overt degree morphology, in the nominal domain which would motivate postulating the projection of a degree structure in the syntax.[316]

In sum, we have found no evidence that nouns have gradable structure that would be grammatically accessible and that would be parallel to that of gradable adjectives. The obvious question that arises is what this means for the status of nouns. Can we still talk about "gradable nouns"? In some sense, yes; though what gradability means for nouns now seems to be different from gradability in the adjectival domain. Looking at the intersection of all the phenomena examined in this dissertation, it can be noticed that certain nouns recur and give rise to particular types of interpretations which mimic the interpretations obtained in the adjectival domain by means of degree modification. However, as has been shown throughout the dissertation, the mechanisms which lead to these interpretations are not the same as those underlying degree modification in the adjectival domain.

The nouns that can be pointed to seem to fall into three classes, which all have in common the fact that they denote or are defined in terms of (instances of) properties. One class is that of nouns which denote abstract properties, whose instances have abstract size (e.g. *idiocy*, *courage*, *generosity* etc.). A second class contains nouns which denote sets of [+human] individuals characterized by such a property, such as *idiot*, which denotes the set of individuals characterized by their idiocy; other examples include: *fool*, *enthusiast*, *fan*, *blunderer* etc. The third class is that of nouns which denote sets of (more or less abstract) objects characterized by an abstract property, such as *blunder*, *mistake* etc.. Note that many of these nouns are related to gradable adjectives, or are derived from (activity or gradable) verbs or other ("gradable") nouns. As we have already seen, it is the interaction of these particular objects (i.e. instances of properties, or tropes) included in the meaning of certain nouns with certain modifiers (e.g. size adjectives) that leads to degree-like interpretations. This means, therefore, that gradability is not represented in the lexical semantics of nouns – whether in terms of a degree argument or in terms of an ordering, depending on the approach one might want to choose (see below for more discussion of this point) – and these nouns are of the same semantic type as regular nouns. (See also chapter 4, §2.4.2, for possible ways of implementing the intuition that under certain circumstances modifiers may target components in the internal semantic make-up of nouns.) Another result of the investigation in chapters 3 and 4 was to exclude stereotypical, figurative noun interpretations (e.g. *Julie is (such) a boy.*) from the realm of gradability, and also to distinguish them from nouns of the type *idiot*. Unlike "gradable" nouns like *idiot*, which denote sets of individuals characterized by a salient property (even though it may be a complex, multi-dimensional one, such as *idiocy*), the domain of stereotypical nouns is defined as an (unordered) set of (partly intersecting) properties stereotypically associated with N.

[316] In addition, the postulation of this type of syntactic structure gives rise to a number of additional problems and complications in the system, such as its location within the extended nominal projection relative to other functional projections that are present and to other modifiers.

This makes it impossible to establish an ordering on the domain. It also makes them incompatible with size adjectives, for instance. However, in certain contexts, it is possible to single out just one property of the set, for example in the context of internal *such* with result clauses or in exclamatives. This places these nouns somewhere in between ordinary, non-gradable nouns and nouns like *idiot*. If we accept this picture, and still want to maintain that the three classes of nouns mentioned above are gradable nouns, then gradability turns out not to be a single homogeneous phenomenon.

What does all this mean for theories of gradability? Given the rather negative conclusion concerning gradability in the nominal domain that emerges from this investigation, we do not really have a basis for evaluating different approaches to gradability. However, if we assume a vague predicate (or degree-less) approach to gradability, we may have an interesting way to understand the difference between nouns and adjectives, as suggested by Constantinescu, Doetjes and Součková (2011). On a degree-less account, gradable adjectives are defined as vague predicates, whose domain is inherently ordered. As such, gradability is a matter of the presence of a (salient) ordering. Degree expressions such as *more* and *less* perform operations on these orderings (cf. Kamp 1975, Klein 1980, 1982, Larson 1988, Van Rooij 2008, to appear, Doetjes, Constantinescu and Součková 2011; see also chapter 1, §1.1.2, for more discussion). Within such a framework, we can interpret the (negative) results yielded by the investigation of gradability in the nominal domain, i.e. the lack of degree modification inside the noun phrase, as indicating that the relevant gradable structure, i.e. orderings, is not available with nouns. So while gradable adjectives denote sets of individuals that are ordered on the basis of a property (e.g. *idiotic* denotes a set of individuals ordered based on their idiocy), nouns do not introduce orderings. Instead, "gradable" nouns are those nouns that either denote sets of objects that have an abstract size, i.e. instances of properties, or are defined in terms of such an object, as indicated in the preceding paragraph. These sets, however, are not (inherently) ordered.[317]

This difference may be related to the claim sometimes found in the literature that, differently from adjectives, nouns are inherently and irreducibly multi-dimensional (cf. Wierzbicka 1986, Kamp 1975, and especially Sassoon 2007a). Sassoon (2007a) argues that adjectives are either uni-dimensional or can be interpreted as being uni-dimensional, and this is what makes them compatible with the comparative. Phrases introduced by *with respect to*, for instance, can be used to explicitly reduce a multi-dimensional adjective to a uni-dimensional interpretation.

(1) healthy with respect to blood pressure

Nouns, on the other hand, are inherently multi-dimensional and remain so; their dimensions cannot be accessed by grammatical operations, and they cannot be transformed into uni-dimensional objects either e.g. by adding a phrase introduced by *with respect to*, as shown in (2)a. As such an ordering can never be defined and

[317] This may also help us understand the difference between the figurative use of the noun *boy* and the adjective *boyish*. Although they seem to be very similar in meaning, the adjective, but not the noun, seems to enable an ordering of the individuals in terms of one characterizing property 'boyishness' (though it is a multi-dimensional one: one can be boyish e.g. with respect to looks or behaviour).

nouns cannot be used in (what Sassoon calls "within-predicate") comparatives , as in (2)b.[318]

(2) a. #Tweety is a bird with respect to flying.
b. #Tweety is {more/ less} (a) bird than Tan is.

Still, Sassoon argues that nouns too have gradable structures, and she uses "typicality" to refer to gradability in nominal concepts. She argues that nouns are associated with grammatically accessible ordering-dimensions which together help to measure the typicality of entities in the category. This claim is based on the observation that *with respect to*-modification and comparatives become available if "the nouns are slightly modified" or if the particle *of* is added to the comparative morpheme:

(3) a. Tweety is a typical bird with respect to flying.
b. A robin is more of a bird than an ostrich.

We would like to point out, however, that these slight modifications to the (bare) noun in fact make an essential difference.

In (3)a the ordering in terms of typicality only becomes grammatically accessible due to the insertion of the modifier *typical*, an adjective interpreted subsectively (as 'typical for a bird'). And the contrast with (2)a indicates this quite clearly. As pointed out by Constantinescu, Doetjes and Součková (2011), nouns may offer in principle all sorts of criteria to order the domain, but these orderings do not seem to be grammatically accessible. For instance, the domain of *boys* can, in principle, be ordered on the basis of height, but without the adjective *tall* explicitly added this ordering is not grammatically active. We have seen the same in the case of modification by size adjectives in chapter 4 (e.g. *big idiot*, *enormous generosity* etc.): once such a modifier is explicitly used, an ordering can be established and comparisons can be made; however, (abstract) size is not an inherent criterion for idiots/idiocy, generosity etc., just as it is not for boys or houses. It can become an ordering criterion only when a modifier is explicitly used.

The example in (3)b is even more revealing from a cross-categorial perspective on gradability. It was noted already in chapter 1 that expressions like *more*, *less* etc. have a cross-categorial distribution, as briefly illustrated again below, and get degree and quantity readings:

(4) a. more intelligent
b. to sleep more (than Peter)
c. more wine (than water)/ more books (than pens)

When used in the nominal domain, these degree modifiers select mass and plural nouns and only give rise to quantity interpretations, whereby they measure or compare amounts of stuff or numbers of entities. Such expressions cannot be used within the noun phrase to directly modify the noun and get a degree reading, as

[318] The examples in (2) are from Sassoon (2007a).

illustrated by the ungrammaticality of (5)a, whose intended interpretation would be 'someone who is more idiotic', which contrasts with the perfect grammaticality of (5)c where *more* modifies the corresponding adjective and indicates a higher degree of the property. Similarly, in (5)b, *more* can only be interpreted as comparing the number of individuals that qualify as idiots; it does not have as a possible alternative interpretation one where *more* would compare individuals in terms of their degree of idiocy, i.e. 'people who are more idiotic than I thought'.

(5) a. *{a/ the} more idiot (than I thought)
b. more idiots (than I thought)
c. more idiotic (than I thought)

On the one hand, this type of distribution would be puzzling on the view that nouns have a similarly accessible gradable structure to adjectives. It is no longer so, however, if we assume that adjectives, but not nouns, introduce orderings on which degree expressions like *more* can operate. On the other hand, the fact that such expressions may combine with gradable adjectives (on a degree reading) and with mass and plural nouns (on a quantity reading) suggests that it is here that we find a parallel with respect to gradability between the adjectival and the nominal domain. Given that plural and mass expressions are generally analysed as partially ordered sets – ordered by the *part-of* relation (cf. Link 1983), then the presence of an ordering would account for the use of expressions such as *more*. It should be noted here that in fact older proposals found in the literature that nouns involve gradable structures in their semantics (and have defined nouns either as measure functions or as containing some sort of degree argument) have been motivated precisely by facts bearing on quantity-related interpretations and the distribution of quantity or measure phrases in the nominal domain (cf. Cresswell 1976, Krifka 1989, 1990).

Thus, an analysis of adjectival gradability in terms of orderings accounts for the grammatical similarity of quantity and degree.[319] It also allows a uniform analysis of these cross-categorial degree modifiers, as their interpretation can be parallel for the different categories.

But let us go back to example (3)b which indicates that *more* can be used with nouns, on a non-quantity reading, and which was used as an argument for Sassoon's claim that nouns have grammatically accessible ordering dimensions, namely in terms of typicality. This is in fact an instance of what we have called predicative partitive structures, which are significantly different structurally from e.g. (5)a and are rather restricted: the degree expression does not directly modify the noun, but occurs outside the noun phrase, on top of the indefinite article, mediated by the preposition *of*, and the modified NP has to be a singular indefinite predicate:[320]

(6) a. He is more of an idiot than I thought.
b. *They are more of idiots than I thought.

[319] Given extensions of this type of approach to the verbal domain (Bach 1986, Krifka 1989), the presence of an ordering would account for the use of expressions such as *more* in combination with verbs as well (cf. Doetjes, Constantinescu and Součková 2011).
[320] The example in (7) are from Bolinger (1972).

(7) a. It is less of a telescope than I had hoped.
b. *I bought less of a telescope that time.

It was shown above that typicality is not generally available as an ordering criterion for nouns. It seems, however, that, under certain conditions, predicative NPs may be re-analysed in terms of an ordering based on typicality. This is what happens in examples like (3)b, (6)a and (7)a. Importantly, it is the predicate *an idiot/ a bird/ a telescope* that is thus reinterpreted. The lexical noun itself, used as the head of a nominal extended projection, cannot be thus re-analysed – witness again the ungrammaticality of (5)a. Nouns are enter the derivation as multi-dimensional – they are inherently and irreducibly multi-dimensional: they characterize complex objects in terms of a number of different properties, none of which can be used as an ordering criterion.[321] It is only an already built-up predicate that can be re-interpreted and forced into a uni-dimensional interpretation which would enable an ordering. This sort of interpretation does not seem to be compatible with the argumental, referential use of noun phrases, as suggested by their restriction to the predicative position (cf. the contrast in (7)). When they do appear in argument positions, it is generally in intensional, non-referential contexts or contexts that allow for a predicative re-interpretation (cf. *I {need/ *found} more of an expert for the job.* – see also chapter 3, §5.3, for discussion). Finally, this reinterpretation can only occur with singular indefinite predicates, not with plural ones (cf. the contrast between (6)a and (6)b). If plurals introduce orderings based on plurality, then this incompatibility suggests that the *part-of* relation destroys (the possibility of constructing) any other potential ordering that could be defined on the basis of the atoms. Hence, it makes it impossible to access/ construe the typicality scale, even in predicative contexts.

To sum up, on the one hand, the results of the investigation in this dissertation indicate that "degree modification" in the nominal domain in fact makes use of mechanisms that are different from those employed in degree modification in the adjectival domain. This suggests a fundamental difference with respect to the (accessibility of) gradable structures found in the two domains. On the other hand, cross-categorial degree modifiers like *more*, *less* etc. do not occur within the noun phrase, directly modifying the lexical noun; and when they do combine with NPs, they yield quantity readings only. These two aspects suggest that the only ordering that is grammatically accessible with nouns is that introduced by the *part-of* relation. This is an ordering that seems to be introduced at a higher level in the nominal structure (cf. Zamparelli 1998, Heycock and Zamparelli 2005, Schwarzschild 2006 for proposals that the relevant lattice structure based on an ordering in terms of the *part-of* relation becomes available higher in the DP structure, above the NP-level). At the lexical level, nouns do not introduce orderings, as they are and need to be inherently multi-dimensional. Only predicatively used noun phrases may, under specific conditions, introduce orderings in terms of typicality. All these facts seem to be straightforwardly accounted for by a theory that models gradability in terms of orderings: the parallel between nominal quantity and adjectival gradability, the lack

[321] In this, nouns differ from multi-dimensional adjectives. The latter can be either explicitly (by the use of *with respect to* phrases) or implicitly reduced to a uni-dimensional interpretation, which makes an ordering, and hence comparison, possible (see Sassoon 2007a for discussion).

of regular degree modifiers with (lexical) nouns, as well as the possible (but restricted) creation of an ordering in *more of an N* structures seem to be more easily and simply captured by such an approach than by a degree-based account. A vague predicate theory, therefore, seems adequate to describe and explain the differences and similarities that exist between the nominal and adjectival domains with respect to gradability. A fuller understanding of gradability and a more solid choice as to its representation requires further investigation of gradability across categories.

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Samenvatting in het Nederlands

Dit proefschrift is een onderzoek naar scalariteit in het nominale domein. In de literatuur wordt scalariteit meestal onderzocht in relatie tot adjectieven, hoewel algemeen wordt aangenomen dat het ook toepasbaar is op andere categorieën (nomina, verba). Dit proefschrift bekijkt scalariteit vanuit een cross-categoriaal perspectief, en meer in het bijzonder, vanuit een nominaal perspectief. Het onderzoek is met name gebaseerd op Engelse feiten, maar bespreekt op verschillende punten Romaanse en Nederlandse data.

Hoofdstuk 1 introduceert het begrip scalariteit en geeft een overzicht van de belangrijkste semantische benaderingen van dit verschijnsel. Een eerste stap om scalariteit in het nominale domein te identificeren, is het verzamelen van tests die in de literatuur zijn voorgesteld om scalaire nomina op te sporen. Een overzicht van de resultaten van deze tests (hoofdstuk 1, sectie 2), laat zien dat ze niet dezelfde uitkomsten hebben. Dat vraagt dan weer om een meer diepgravend onderzoek.

Dit onderzoek wordt uitgevoerd in de hoofdstukken 2-4, waarvan elk hoofdstuk een aantal contexten onderzoekt die verondersteld worden gevoelig te zijn voor de aanwezigheid van een scalair nomen. Geval na geval blijkt echter dat de voorgestelde diagnostiek niet werkt op de veronderstelde manier, en dat andere factoren betrokken zijn bij het creëren van de geobserveerde effecten. Uiteindelijk blijft er weinig evidentie over voor graadmodificatie in het nominale domein, en al evenmin voor het bestaan van goede tests voor scalaire nomina. Bovendien komen de feiten niet overeen met wat er in het adjectivale domein gevonden wordt.

In hoofdstuk 2 komen twee omgevingen aan de orde waarvan beweerd wordt dat ze alleen gebruikt kunnen worden met scalaire nomina, namelijk *N of an N*-constructies (bijvoorbeeld *that idiot of a doctor* 'die idioot van een dokter') en het small clause complement van het werkwoord *seem* 'schijnen' (bijvoorbeeld *He seems an idiot* 'Hij schijnt een idioot'). Er wordt gesteld dat de distributie van zelfstandige naamwoorden in deze contexten niet bepaald wordt door scalariteit – noch op lexicaal noch op syntactisch niveau – maar door andere factoren. Deze factoren overlappen deels met scalariteit en brengen – onder bepaalde voorwaarden – vergelijkbare effecten teweeg. In het geval van de *N of an N*-constructie wordt aangetoond dat een zelfstandig naamwoord alleen in het eerste gedeelte van de constructie voorkomt als het een waardeoordeel kan uitdrukken. In veel gevallen gaat het daarbij om zelfstandige naamwoorden die gerelateerd kunnen worden aan een scalair adjectief (bijvoorbeeld *idiot* 'idioot'), maar de constructie is ook mogelijk met nomina die duidelijk niet scalair zijn (bijvoorbeeld *box* 'doos', *peach* 'perzik').

Ook in het geval van *seem* 'schijnen', blijkt dat, onder bepaalde voorwaarden, niet-scalaire nomina gebruikt kunnen worden. Hieruit volgt dat deze twee omgevingen zijn uitgesloten als tests voor scalariteit. De twee casestudies in dit hoofdstuk laten zien hoe scalariteit verward kan worden met nauw verwante verschijnselen zoals het toekennen van een waardeoordeel.

Hoofdstuk 3 richt zich op het bestuderen van *such* 'zo'n/ zulk'. In de literatuur wordt een fundamenteel onderscheid voorgesteld tussen een "soort"-*such* en een "graad"-*such*. In het proefschrift wordt stelling genomen tegen deze opvatting en wordt aangetoond dat de zogenaamde "graad"-*such* geen graadoperator is. Net als in het geval van *N of an N* en *seem* blijkt de relevante constructie ook voor te komen met duidelijk niet scalaire nomina (bijvoorbeeld *way* 'manier' of *situation* 'situatie'). Voorgesteld wordt dat deze such (die we "interne" *such* noemen om hem te onderscheiden van de gebruikelijke anaforische en deiktische toepassingen van "soort"-*such* of "externe" *such*) wel degelijk een uitdrukking is die refereert aan een soort. Interne such stelt echter andere eisen aan de sub-soorten die het kan selecteren, hetgeen de verschillen in distributie en interpretatie verklaart die er bestaan met de gewone "soort"-*such*. Meer in het bijzonder selecteert interne such saillante subsoorten die geïdentificeerd worden aan de hand van hun natuurlijke gevolgtrekkingen. Deze gevolgtrekkingen worden uitgedrukt door middel van adverbiale bijzinnen van gevolg, maar kunnen in exclamatieven ook impliciet blijven. Hieruit kunnen we concluderen dat interne *such* niet gezien kan worden als een test voor de scalariteit van het nomen dat het modificeert, en daarom evenmin gebruikt kan worden als bewijs voor het bestaan van scalaire structuren in de semantiek en/of syntaxis van zelfstandige naamwoorden. In het laatste deel van dit hoofdstuk worden een aantal verwante structuren besproken (bv. *more of an idiot*, *quite an idiot* en exclamatieven).

In hoofdstuk 4 wordt een aantal "graadadjectieven" behandeld. Uit het overzicht in sectie 2 van hoofstuk 1 blijkt dat de beschikbaarheid van modificatie door deze adjectieven (in de relevante lezing) de meest betrouwbare test voor scalariteit biedt. Graadadjectieven zijn daarmee de meest veelbelovende kandidaten voor adnominaal gebruikte graadexpressies. Echter, het meer gedetailleerde onderzoek naar maatadjectieven zoals *big* 'groot', adjectieven zoals *real* 'echt', en evaluatieve adjectieven zoals *terrible* 'verschrikkelijk', laat zien dat er geen evidentie is voor deze hypothese. Ten aanzien van de maatadjectieven blijkt dat de distributie en interpretatie ervan geen graadanalyse van deze uitdrukkingen ondersteunen. De feiten wijzen in alle gevallen op een andere analyse. Maatadjectieven kunnen een abstracte interpretatie krijgen, ook in predicatieve positie, waar ze niet als graadoperatoren geanalyseerd kunnen worden. Deze onafhankelijk noodzakelijke analyse kan naar alle gevallen van maatadjectieven met een graadachtige betekenis worden uitgebreid. Voor adjectieven zoals *real* en *true* 'echt' wordt beargumenteerd dat ze een epistemische, evidentiële interpretatie hebben. In combinatie met sommige nomina geeft dit een lezing die vergelijkbaar is met een graadlezing in het adjectivale domein. Tenslotte wordt beargumenteerd dat evaluatieve adjectieven een expressieve betekenis hebben, en dat de graad-achtige interpretatie afgeleid kan worden als een implicatuur, die ontstaat doordat het adjectief de positieve of negatieve connotatie van een nomen versterkt.

Het onderzoek in de hoofdstukken 2-4 laat zien dat de mechanismen die gebruikt worden voor graadmodificatie in het adjectivale domein niet gevonden worden in het nominale domein. Dit suggereert een fundamenteel verschil in de grammaticale toegankelijkheid van scalaire structuren in de twee domeinen.

Een voor de hand liggende vraag die zich nu voordoet is: Wat betekent dit voor de status van zelfstandige naamwoorden? Kunnen we nog wel over scalaire nomina praten? In ruimere zin is het antwoord op deze vraag bevestigend. Wel is duidelijk dat scalariteit iets anders betekent voor zelfstandige naamwoorden dan voor adjectieven. De intersectie van alle fenomenen in deze dissertatie in acht nemend, kan geconcludeerd worden dat bepaalde zelfstandige naamwoorden telkens terug komen, en dat deze een bepaald type interpretatie hebben die lijkt op graadbetekenis zoals we die kennen in het adjectivale domein. Wat het onderzoek in deze dissertatie echter duidelijk maakt is dat de manier waarop dit type interpretatie tot stand komt in beide domeinen niet overeen komt.

De zelfstandige naamwoorden waar het hier om gaat vallen uiteen in drie klassen. Een eerste klasse is die van zelfstandige naamwoorden die abstracte eigenschappen weergeven, waarvan de individuele instanties gemodificeerd kunnen worden door een abstract gebruikt maatadjectief (bv. *idiocy* 'idiotie', *courage* 'moed', *generosity* 'vrijgevigheid' etc.). De tweede klasse bevat zelfstandige naamwoorden die verwijzen naar individuen die gekarakteriseerd worden door een dergelijke eigenschap, zoals *idiot* 'idioot'; andere voorbeelden zijn: *fool* 'dwaas', *enthusiast* 'enthousiasteling', *fan* 'fan', *blunderer* 'kluns' etc. De derde klasse is die van de zelfstandige naamwoorden die verwijzen naar (min of meer abstracte) objecten die gekarakteriseerd worden door een abstracte eigenschap, zoals *blunder* 'blunder', *mistake* 'vergissing', *failure* 'mislukking'. In al deze gevallen is er dus een betekeniscomponent die overeenkomt met een abstracte eigenschap. Bij het gebruik van abstracte maatadjectieven wordt geprediceerd over een instantie van een dergelijke eigenschap, hetgeen resulteert in een betekenis die lijkt op een hoge graadbetekenis. Het is uiteraard mogelijk om bovengenoemde zelfstandige naamwoorden scalair te noemen, maar het is wel van belang daarbij te beseffen dat scalariteit in dat geval geen homogeen verschijnsel is, omdat het zich bij nomina anders manifesteert dan bij adjectieven.

Hoofdstuk 5 behandelt kort de implicaties van de resultaten voor theorieën over de representatie van scalariteit. Het onderzoek naar scalariteit in het nominale domein leidt tot een negatieve conclusie: er is geen bewijs gevonden voor de stelling dat zelfstandige naamwoorden scalaire structuren hebben die grammaticaal toegankelijk zouden zijn en die overeen zouden komen met die van scalaire adjectieven. Desondanks stelt dit hoofdstuk voor dat de resultaten van dit proefschrift begrepen kunnen worden als uitgegaan wordt van een analyse die scalaire adjectieve definieert in termen van vage, geordende predicaten (cf. Klein 1980, 1982, Doetjes, Constantinescu en Součková 2011). Een dergelijke analyse, die geen gebruik maakt van graad-argumenten, werpt een interessant licht op het verschil tussen zelfstandige naamwoorden en adjectieven: het gebrek aan graadmodificatie (bijvoorbeeld het gebruik van de comparatief *more* 'meer') binnen de naamwoordgroep zou dan aangeven dat de relevante scalaire structuur (ordeningen) niet bestaat voor zelfstandige naamwoorden. Merk overigens op dat

ordeningen wel een rol lijken te spelen bij de uitdrukking van hoeveelheden, zoals in *more books* 'meer boeken'. Scalaire adjectieven denoteren verzamelingen van individuen die geordend zijn op basis van een eigenschap. Zo denoteert het adjectief stupid *stupid* 'dom' een verzameling individuen die geordend zijn door hun domheid. Zelfstandige naamwoorden daarentegen introduceren geen dergelijke ordening. "Scalaire" zelfstandige naamwoorden zijn die naamwoorden die ofwel verzamelingen van objecten (in dit geval instanties van eigenschappen) aangeven met een abstracte omvang, ofwel verzamelingen van objecten/individuen die gedefinieerd worden door een instantie van een dergelijke eigenschap. Deze verzamelingen zijn echter niet inherent geordend.

Samenvattend leidt het onderzoek tot de conclusie dat er een fundamenteel verschil is tussen zelfstandige naamwoorden en adjectieven op het gebied van scalariteit, en dat nominale scalariteit eerder een illusie is dan een grammaticale realiteit.

Curriculum Vitae

Camelia Constantinescu was born on 2 December 1979 in Bucharest, Romania. She spent her childhood and teenage years in Constanţa, which she considers to be her hometown. In 1998 she graduated from the bilingual Romanian-English class of "George Călinescu" high-school, and went on to study English and French at the *Faculty of Foreign Languages and Literatures* of the University of Bucharest, After graduating in 2002, she enrolled in the Master programme in Applied Linguistics and ELT Methodology at the same university. As part of her graduate education, she spent one semester at the *Dipartimento di Scienze del Linguaggio*, Ca'Foscari University, Venice, Italy, where she attended courses in theoretical linguistics. She received her Master's degree in 2003 with a dissertation on *Degree Phrases in English and Romanian* (supervisor: prof. dr. A. Cornilescu). She spent the next couple of years teaching English language and linguistics at the Polytechnic University of Bucharest and at the English Department of the University of Bucharest. During that time, she also attended the PhD programme in linguistics at the University of Bucharest. In 2006 she moved to the Netherlands to start work as a PhD candidate in the VIDI project entitled *Degrees across Categories* directed by dr. J.S. Doetjes at the *Leiden University Centre for Linguistics* (LUCL). This dissertation is the result of the research carried out during her four years as a PhD student at LUCL. She is currently employed as a lecturer in the *Department of French Language and Culture* at Leiden University.