

# Gradability in the nominal domain

Constantinescu, C.

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# **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

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!)

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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 *biq* 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.):<sup>117</sup>

- (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]

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:

```
a. un tel
                    homme
                                                                    [French]
(13)
          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...)
                       idiot (that...)
          a such
          'such an idiot (that...)'
                 solcher
                                                                    [German]
      c. ein
                           Mann
                 such
                           man
          a
          'such a man'
                 solcher
                           Idiot (dass...)
      c'. ein
          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.<sup>119</sup>

(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

 $<sup>^{118}</sup>$  For more syntactically-oriented work on such, see Bresnan (1973), Wood (2002), Wood and Vikner (2011).

The example in (16) is from Carlson (1977).

realization relation that holds between object-level individuals (those superscripted °) and the kinds they instantiate (the elements superscripted <sup>k</sup>):

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

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

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 proform for an adjective, i.e. it is a simple variable ranging over one-place predicates, formally  $v_n$ ,  $\langle \cdot \rangle_{e>t} \rangle$ . 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

<sup>&</sup>lt;sup>120</sup> 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)<sup>121</sup> 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

<sup>&</sup>lt;sup>121</sup> 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):

<sup>(</sup>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):

<sup>(</sup>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:

<sup>(</sup>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...
  - 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). <sup>122</sup> 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:<sup>123</sup>

- (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

<sup>&</sup>lt;sup>122</sup> 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)

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  $\langle e^o, t \rangle$ . 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 asphrases (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

<sup>&</sup>lt;sup>124</sup> 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: <sup>125,126</sup>

- (24) a. It is really a joke to try to reason with such an idiot as you!<sup>127</sup>
  - 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...<sup>129</sup>

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.

<sup>(</sup>i) a. Next time I won't be such an idiot as to put the wrong barring password in three times.

<sup>&</sup>quot;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:

<sup>(</sup>ii) You are a fool to believe such a thing!

Example (24)c is from Bolinger (1972).

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

Source: W. M. Thackeray – The Virginians

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. <sup>130</sup>
- 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.<sup>131</sup>
- 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 a shamed 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...<sup>136</sup>
  - 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.<sup>137</sup>
  - d. Public opinion in Finland during the spring 1941 was such that it would have been extremely difficult for any government to explain... <sup>138</sup>
  - 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...<sup>139</sup>

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.

 $<sup>^{130}\</sup>quad Source: http://education.theage.com.au/cmspage.php?intid=135\&intversion=31$ 

Source: http://cducuton.atcuge.com/adven/spage.pnp.in

Source: http://www.marxists.org/archive/marx/works/cw/volume06/footnote.htm#69

Source: Will Rogers, US humorist and showman (1879 – 1935) (at http://www.quotationspage.com/)

Adapted from http://www.state.il.us/HPA/facsimiles.htm

<sup>135</sup> Source: stars.nhb.gov.sg/stars/tmp/ygce19810811s.pdf

Source: http://www.eyewitnesstohistory.com/plague.htm

Source: A. Bierce – *Can such things be?* (http://bierce.thefreelibrary.com/Can-Such-Things-Be/22-1)

Source: http://www.kevos4.com/Part13 Was the Continuation War Unavoidable.htm

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. 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.

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 coreference with an explicit or implicit antecedent, here such needs to pick out a subtype 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

<sup>&</sup>lt;sup>141</sup> 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):

<sup>(</sup>i) Alice bought the same book as Beth.

<sup>(</sup>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]

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 socalled "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, ayp, 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 subtypes 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

<sup>&</sup>lt;sup>142</sup> 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 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:<sup>143</sup>

(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:

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 " $\subseteq$ " (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. <sup>144</sup> 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.

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... <sup>147</sup>

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

Adapted from: http://www.freewebs.com/mathareenaboppis/riddles.htm

Source: Will Rogers, US humorist and showman (1879-1935) (at http://www.quotationspage.com)

 $<sup>{}^{147} \</sup>quad Source: \quad http://delphi.about.com/od/windowsshellapi/ss/setprocessworkingsetsize-delphi-program-memory-optimize.htm$ 

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.<sup>149</sup>
- 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.<sup>150</sup>
- 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...<sup>151</sup>

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.<sup>152</sup>
  - 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...<sup>153</sup>
  - 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...<sup>154</sup>

*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

Source: http://www.4lawschool.com/torts/williams.htm

 $<sup>^{150} \</sup>quad Source: \ http://nursinglink.monster.com/topics/10247-every-nurse-should-always-be-polite-no-matter-what-the-situation/posts$ 

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

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:

<sup>(</sup>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

Source: http://www.homeoffice.gov.uk/about-us/home-office-circulars/circulars-2010/001-20101/

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

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.<sup>156</sup>

- (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.<sup>157</sup>
  - 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 subtype 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

<sup>&</sup>lt;sup>156</sup> 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 subtypes that need to be identified by natural consequences.

<sup>(</sup>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).

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)<sup>158</sup>. 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<sup>160</sup>. (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.

<sup>&</sup>lt;sup>158</sup> See Rijkhoek (1998) for a different type of account, namely in terms of conjunction.

The example in is from Meier (2003) who adapts it from Rouveret (1978).

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 subtypes 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<sup>161</sup>:

(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

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). 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

<sup>&</sup>lt;sup>162</sup> 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 subtypes 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'.<sup>163</sup>

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

<sup>&</sup>lt;sup>163</sup> 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 (subtype 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 subtype 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*).

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). <sup>165</sup>

- (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'). <sup>166</sup> This contrast is sharper in Dutch, where the corresponding verbs *vinden* and *denken* are more clearly specialized and differentiated in meaning: <sup>167,168</sup>

<sup>&</sup>lt;sup>165</sup> 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.

<sup>&</sup>lt;sup>166</sup> 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.

<sup>&</sup>lt;sup>167</sup> A similar contrast exists in French between the verbs *trouver* and *penser*.

<sup>&</sup>lt;sup>168</sup> 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), <sup>169</sup> or the verb *suppose*, <sup>170</sup> 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). <sup>171</sup> 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

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.

 $<sup>^{170}</sup>$  Even when context is provided that makes reference to some sort of precedent for the expressed opinion.

 $<sup>^{171}</sup>$  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:

<sup>(</sup>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. <sup>172</sup> 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 epistemicityand/or evidentiality-related meanings.<sup>173</sup> 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.

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.)

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, <sup>174</sup> 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.<sup>175</sup> 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.<sup>176</sup> This view is inspired by Nouwen's (2005, 2011a) approach to adverbs like *surprisingly*, *unusually* etc. and

 $<sup>^{174}</sup>$  Recall that a similar effect was noted in connection with the simple predicative use of stereotypical nouns.

<sup>&</sup>lt;sup>175</sup> 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.

<sup>&</sup>lt;sup>176</sup> 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). <sup>177</sup> 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. <sup>178</sup> 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 subtype. 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:

 $<sup>^{177}</sup>$  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.

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.<sup>179</sup> 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. <sup>181</sup> But note that simply introducing an ordering along a scale of unexpectedness is not enough, so the operator will also

 $<sup>^{179}</sup>$  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.).

 $<sup>^{180}</sup>$  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.

<sup>&</sup>lt;sup>181</sup> 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:

<sup>(</sup>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:  $\{... P(z), P(y), P(x)...\}$ 

<sup>(</sup>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.  $\operatorname{such}_d$  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).<sup>182</sup>

#### (63) a. such an intelligent man

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  $\rightarrow$   $such/\_NP$ ; 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, nongradable 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 <*d*> 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  $\cap$  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.*). <sup>183</sup> 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. 

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 $<sup>^{183}</sup>$  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.

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:

<sup>(</sup>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:

<sup>(</sup>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 ]
                        such
                                           idiot<sub>MASC</sub>
              a_{\text{MASO}}
              'such an idiot'
         b. ein
                        [solcher [
                                           guter
                                                              Freund ]]
                        such_{\scriptscriptstyle{MASC}}
                                                              friend_{MASC}
                                           good
              'such a good friend'
```

In order to modify just the adjective, either the invariant version *solch* or *so* will be used, as illustrated below:

```
Freund1
(67)
        a. ein
                      [[solch
                                   guter]
                                   good
                                                 friend<sub>MASC</sub>
                        SO
             'such a good friend'
                                                 Freund]
        b. ein
                      [[so
                                    guter]
                                    good<sub>MASC</sub>
                                                 friend<sub>MASC</sub>
             '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 subtypes, 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 subtypes 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. <sup>185</sup> 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

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 kindreference, 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. We refer here to expressions such as *kind of* <sup>187</sup>, 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.

<sup>&</sup>lt;sup>186</sup> 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:

<sup>(</sup>i) I don't have that kind of money and I don't have that kind of time. (Bolinger 1972) <sup>187</sup> 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 socalled "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*).<sup>188</sup> 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, Whexclamatives 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

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. <sup>189</sup>

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. <sup>190</sup> 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. <sup>191</sup> 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!

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?

<sup>&</sup>lt;sup>190</sup> 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.

Rett's (2008b,c) analysis involves an illocutionary operator which takes as its argument a degree property D (type <d,<s,t>>) (which is how she analyses the content of the wh-exclamative), whose degree and world arguments it binds, and returns a proposition  $\lambda w.D(d)(w)$  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. <sup>192</sup> 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 biq. 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 whexclamatives 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

<sup>&</sup>lt;sup>192</sup> 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. <sup>194</sup>

- (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

<sup>&</sup>lt;sup>193</sup> 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:

<sup>(</sup>ii) That's quite a car you've got there.

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:<sup>195</sup>

- (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...<sup>196</sup>

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 <d,<e,t>> and *quite* could be defined as a degree operator (type <<d,<e,t>>>) that boosts the standard somewhat. This seems to be the type of analysis that Matushansky (2002b) envisages, though she does not spell it out. <sup>197</sup> 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. <sup>198</sup> When modifying non-gradable nouns, as in (76), *quite* 

<sup>&</sup>lt;sup>195</sup> 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*.

Source: http://www.americanthinker.com/2006/04/pinch\_gets\_punched.html

 $<sup>^{197}</sup>$  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):

<sup>(</sup>i)  $[[quite]] = \lambda P_{\langle d, \langle e, t \rangle} . \lambda x. \exists d [P(x,d) \& d \rangle s]$ 

where *d>>s* expresses that the degree exceeds the standard to some considerable degree

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.):<sup>199</sup>

not the other way round.

<sup>&</sup>lt;sup>199</sup> 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').<sup>200</sup> (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 subsection, 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*-

It should be noted, however, that these structures are not completely interchangeable (the examples below are from Bolinger 1972 and L. McNally p.c.):

<sup>(</sup>ia), the structure in (ib) is also possible:

<sup>(</sup>i) a. quite an unusual person

b. a quite unusual person

<sup>(</sup>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).

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 quitestructure may be explicitly mentioned in the linguistic context:

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

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.

Source: http://www.amazon.com/Last-Invisible-Boy-Evan-Kuhlman/dp/1416957979

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):

Johnny is quite the boy. (i)

<sup>[</sup>cf. (77)a] (ii) a. Julie is quite the boy.

b.. That old Cadillac my grandpa owned was quite the boat! [cf. (77)b] [cf. (77)c]

Their new place is quite the palace.

<sup>(</sup>iii) He is quite the fool.

<sup>(</sup>iv) a. He is quite the lawyer.

She was quite the belle of the ball.

He is quite the gentleman / man about town / soldier of fortune.

d. It is at once rich, tasty, and quite the thing.

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:

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...<sup>205</sup>
  - 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 bov. <sup>206</sup>

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.<sup>207</sup>

- (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.

Source: http://conundrum131.tripod.com/childhood.htm

Source: www.fanfiction.net>Anime/Manga>Naruto

Source: http://www.bartleby.com/310/6/1.html

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..<sup>208,209</sup>

```
credeam.
        mai
                copil
                         decât
                                                                               [Romanian]
    is COMP
                child
                        than
                                 thought.1sg
    'He is more childish than I thought.'
                                                                               [Spanish]
b. Es muy
                niño.
                child
    is very
    '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:

```
a. unul
                 mai
                         copil
                                  ca
                                           mine
    one.the
                         child
                                  than
                 COMP
    'one (who is) more child-like than me
    una niña
                     muv
                              niña
       child.feм
                     verv
                              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

<sup>&</sup>lt;sup>208</sup> 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).

<sup>(</sup>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.

<sup>(</sup>ii) I wonder how much the village idiot he is generally considered.

<sup>&</sup>lt;sup>209</sup> 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:

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.

[+human]

(84) a. I need more of an expert for that job.

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.) <sup>211</sup> 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).

<sup>&</sup>lt;sup>210</sup> The examples in (82)-(85) are from Bolinger (1972).

<sup>&</sup>lt;sup>211</sup> 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.<sup>212</sup> 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.

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.)

etc.).

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):<sup>213</sup>

- (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:<sup>214</sup> 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.<sup>215</sup>

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):<sup>216</sup>

<sup>&</sup>lt;sup>213</sup> 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:

<sup>(</sup>i) Bling Bling says "tweet" (I'm convinced he's more a bird than a cat).

<sup>&</sup>lt;sup>214</sup> They also differ from structures with *quite* which do not always easily allow stereotypical interpretations.

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.<sup>217</sup> 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. 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.

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).

<sup>&</sup>lt;sup>217</sup> 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).

<sup>&</sup>lt;sup>218</sup> 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).

<sup>&</sup>lt;sup>219</sup> 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 subtypes. In the last part of the chapter we briefly examined wh-exclamatives, quitestructures 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.