



1968; Heim, 1979).<sup>2</sup>

(3) John told me [<sub>DP</sub> the capital of Italy].  $\approx$  *what the capital of Italy is*

CEs and CQs raise the question of how DPs come to behave like embedded clauses. Following the by now prevalent view, I assume that these phrases are truly DPs in syntax (and not clause parts of which have undergone deletion).

CEs and CQs are highly restrictive in what DPs they allow as an argument. In Castroviejo-Miró and Schwager (2008) (henceforth, CS-08), we show that the restrictions imposed differ across these two classes, but even across different CE-constructions. We consider this evidence that the lexical entry of the embedding predicate is responsible for the clause-like contribution of the respective DP as well as for the restrictions on its syntactic and semantic properties. Therefore, in this paper, I focus exclusively on CEs occurring in expletive constructions like (1).

I build on CS-08's generalisation that the crucial restriction concerns the DPs ability to pick out a degree or a kind. I recapitulate our proposal to unify degrees and kinds as dual types and focus on a problem arising with monotonicity: if (1-b) is true, the speaker expected the house to be smaller, not just of any other height.<sup>3</sup> Ultimately, I argue for a modification of CS-08's account that brings it closer to Rett (2008a)'s analysis for unembedded exclamatives, while maintaining the restrictions on what DPs can occur in such expletive CE-constructions.

## 2 Getting to know the *amazing*-constructions

Evaluative adjectives like *amazing*, *surprising*, *terrible*, *awful*, *stupid*, ... and the corresponding adverbs appear in various syntactic configurations. This gives rise to interesting differences in interpretation, e.g. Morzycki (2004); Katz (2005); Nouwen (2005) for contrasts between (4-a) vs. (4-b).

- (4) a. John is amazingly tall.  
 b. Amazingly, John is tall.  
 c. It is amazing that John is tall.  
 d. It's amazing how tall John is.

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<sup>2</sup>For recent discussion see Nathan (2006) and further references in Castroviejo-Miró and Schwager (2008).

<sup>3</sup>Despite its seemingly propositional form, the *amazing*<sub>expl</sub>-construction gives rise to linguistic objects that do not seem fit for assertive (properly descriptive) usage. Rather, and in contrast to declarative embedding *it's amazing (that)*, they look a little like an explicit encoding of Rett (2008a)'s illocutionary force operator DEGREE E-FORCE. Being in general unsympathetic to force operators as part of the syntactic structure (cf. Schwager (2006); Portner (2005) for a similar spirit), I stick to a propositional analysis and assume that an additional meaning component (in terms of presuppositions and/or conventional implicatures) may be needed.

In this paper, I focus on the contrast between *amazing* as occurring in predicative position (*amazing*<sub>simpl</sub>, exemplified in (5-a)) vs. the expletive CE-construction (*amazing*<sub>expl</sub>, exemplified in (5-b)).

- (5) a. John is amazing. *amazing*<sub>simpl</sub>  
 b. It's amazing the stupid things he says. *amazing*<sub>expl</sub>

Syntactically, *amazing*<sub>simpl</sub> allows for any type of quantificational or referential DP, but *amazing*<sub>expl</sub> requires its postposed DP to be a definite DP (cf. Portner and Zanuttini, 2005).

- (6) It's amazing the/\*a/\*every secret that Matthew spread.

Semantically, we observe at least the following differences between *amazing*<sub>simpl</sub> and *amazing*<sub>expl</sub>. Firstly, *amazing*<sub>simpl</sub> allows for substitution of co-extensional expressions *salva veritate*, cf. (7), while *amazing*<sub>expl</sub> does not, cf. (8):

- (7) John is amazing.  
John is Mary's boyfriend.  
 ∴ Mary's boyfriend is amazing.
- (8) It's amazing the boyfriends Mary had last year.  
 The boyfriends Mary had last year were exactly the students  
Peter had last year.  
 ∴ It's amazing the students Peter had last year.

Secondly, *amazing*<sub>simpl</sub> attributes amazingness to an individual. In contrast, *amazing*<sub>expl</sub> expresses (roughly) that the DP has a different extension from what was expected.

- (9) It's amazing the number of people who look the other way.  
 ≈ *It's amazing what n is such that n-many people look the other way.*

But the difference cannot just be between individuals and individual concepts. The examples in (11-b) and (11-c) are just as bad as (11-a) and cannot be understood in the obvious sense.<sup>4</sup>

- (10) a. The president of the US is amazing.  
 b. Barack Obama is amazing.
- (11) a. #It's amazing Barack Obama.  
 b. #It's amazing the president of the US.  
 ≠ *It's amazing who is the president of the US.*  
 c. #It's amazing the presidents of the most powerful countries.  
 ≠ *It's amazing who are the presidents of the most powerful countries.*

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<sup>4</sup>I ignore referential readings for *it* in (11) and other examples.

Perspicuously many DPs following *amazing*<sub>expl</sub> contain relative clauses. Portner and Zanuttini (2005) argue that the presence of a relative clause is (i) obligatory and (ii) directly responsible for the phenomenon that these DPs achieve exclamative like meanings. In CS-08, we argue against both assumptions. On the one hand, we find both DPs without relative clauses that can appear under *it's amazing* (cf. (12-a)), and DPs with relative clauses that cannot (cf. (12-b)).

- (12) a. It's amazing [the height of that building].  
 b. #It's amazing [the man [who climbed Mount Everest]].

Portner and Zanuttini (2005) claim that (i) and (ii) apply also to DPs used as stand-alone exclamatives, henceforth, **Nominal Exclamatives** (NE).<sup>5</sup> Our findings carry over to this class as well:

- (13) a. The height of that building!  
 b. (*to the proud architect*;) ?The height of the dome!  
 c. #The man who climbed Mount Everest!

On the other hand, in some cases, the relative clauses seem to be embedded too deeply in order for Portner and Zanuttini (2005)'s mechanism to derive the intended exclamative denotation (a particular set of propositions).

- (14) It's amazing [<sub>DP</sub> the number of [ people [<sub>CP</sub> you meet at those parties] ] .

On the basis of a small databasis collected online,<sup>6</sup> CS-08 conclude that the class of DPs embeddable in the *amazing*<sub>expl</sub>-construction contain either (i) arbitrary head nouns modified by relative clauses (class 1), or (ii) head nouns that express gradable properties (*height, amount, ...*; class 2), or (iii) overt kind/manner-like modifiers (*kind, way, ...*; class 3).<sup>7</sup>

Moreover, examples in class 1 (that is, DPs containing relative clauses that modify the head noun), express either (a) amazement at the amount/number of the modified property's extension, or (b) amazement at the kind of entities that fall under the thus modified property.

- (15) It's amazing the people you meet at these conferences.  
 a. ... *the number of people you meet at these conferences*  
 b. ... *the kind of people you meet at these conferences*

<sup>5</sup>This use of the terminology follows Rett (2008a) and is at odds with Portner and Zanuttini (2005)'s use.

<sup>6</sup>We google searched for strings like "it's amazing the", "it's surprising the", "it's stupid the", "it's terrible the", "it's wonderful the", "it's awful the" and manually evaluated whether the results were instances of the construction in question, and whether the context suggested native speaker competence of the source. This left us with a sample of 62 clear-cut examples.

<sup>7</sup>The only exception to this classification came up in König (2008), who cites *The nerves of some people!*. Due to the idiomatic nature of the expression we will leave it aside.

Relative clauses are well-known to induce kind or degree readings in other contexts as well (cf. Carlson, 1977; Heim, 1987; Grosu and Landman, 1998).

- (16) a. It will take us the rest of our lives to drink the champagne they spilt last night. *the amount of*  
 b. We will never be able to recruit the soldiers the Chinese paraded on May 1. *the number of*  
 c. You no longer see the telephones that there were in my grandmother's time. *the kind of*

So, obviously, the DP embedded under *amazing<sub>expl</sub>* has to be interpreted as referring to degrees or kinds. Furthermore, this degree or kind reference has to be index-dependent. Expressions that can only be rigid kind or degree designators are disallowed:

- (17) a. #It's amazing dogs/the dog.  
 b. #It's amazing six meters.

Therefore, we postulate the following semantic restriction on the DP embedded under *amazing<sub>expl</sub>*:

- (18) **CS-08's restriction:**  
 The DP embedded under *amazing<sub>expl</sub>* has to denote a function from indices to degrees or to kinds.

In section 5.2, I will compare this assumption to Rett (2008a)'s analysis of unembedded exclamatives.

### 3 Dual types and different properties

Having established (18) as the restriction on the argument of *amazing<sub>expl</sub>*, CS-08 proceed to solve two puzzles: (i) what is the relation between *amazing<sub>simpl</sub>* and *amazing<sub>expl</sub>* as occurring in (19-a) and (19-b) respectively?

- (19) a. John is amazing. *amazing<sub>simpl</sub>*  
 b. It's amazing the things you can find in the dumpster. *amazing<sub>expl</sub>*

And (ii), why do degrees and kinds pattern together, that is, why are (non-trivial) functions from indices to kinds/degrees acceptable in the argument position of *amazing<sub>expl</sub>*, but ordinary individual concepts are not?

#### 3.1 Kinds and degrees on a par: dual types

It is well-known that kinds and degrees pattern together in many constructions. Examples include anaphora like English *such* (Carlson, 1977; Heim, 1987), German

*so* (cf. (20)) and Polish *taki* (e.g. Landman and Morzycki, 2003; Landman, 2006; Umbach and Endriss, 2008).

- (20) a. Hans ist 1.80m und Maria ist auch **so** groß.  
       Hans is 1.80m and Maria is also so tall  
       b. Hans hat einen Beagle, und Maria will auch **so** einen Hund.  
       Hans owns a beagle and Maria wants also such a dog

In CS-08, we argue that kinds and degrees pattern together because they share the same dual nature of being properties (type  $\langle s, et \rangle$ ) and entities. The correspondence between kinds and properties is well-established (cf. Chierchia, 1984, 1998; Landman, 2006). Non-rigid properties that are contextually associated with ‘sufficiently regular behavior’ can be mapped onto kinds by the kind operator  $\cap$ .<sup>8</sup>

- (21) for  $P$  of type  $\langle s, et \rangle$ :  $\cap P :=$  the kind  $P$  (type  $e$ ), if  $P$  picks out a class of objects that display sufficiently regular behavior, undefined else.<sup>9</sup>

But what is the relation between degrees and properties? Degrees of instantiation of a gradable property  $P$  are often considered primitive. But we can also construe the degrees to which a gradable property  $P$  is instantiated by comparing individuals across worlds w.r.t.  $P$  (cf. discussion in Cresswell, 1976). Such a construal leads to a one-to-one correspondence between degrees and properties.<sup>10</sup> Consider  $P = \textit{height}$ .

- (22) a. The Empire State building is higher than the Commerzbank tower.  
       b. The Commerzbank tower could have been higher.  
       c. Sherlock Holmes is as tall as G. W. Bush.

Comparing them in this way, we group together individuals in a world according to their exact sizes there (we form the equivalence classes induced on  $W \times D_e$  by the dimension of height):

$c_{1.80m}$ :	$\langle w_1, g.w.bush \rangle, \langle w_2, s.holmes \rangle, \langle w_3, g.w.bush \rangle, \dots$
$c_{1.90m}$ :	$\langle w_2, g.w.bush \rangle, \langle w_3, s.holmes \rangle, \langle w_4, g.w.bush \rangle, \dots$
$\dots$	$\dots$
$c_{259m}$ :	$\langle w_1, \textit{commerzbank} - \textit{tower} \rangle, \langle w_2, \textit{empire} - \textit{state} \rangle, \dots$
$\dots$	$\dots$

<sup>8</sup>The possibility of a shift between entities and properties has been argued to be independently necessary for nominalizations as in *John is nice* vs. *Being nice is nice*. For an implementation that avoids obvious inconsistencies as would arise in standard set theory, cf. Chierchia (1984).

<sup>9</sup>Note that this is a slight deviation from Chierchia (1984)’s operator that treats kinds as individual concepts. I follow Carlson (1977) and Landman (2006) in treating kinds as individuals proper.

<sup>10</sup>Note that I do not make a case for the ontological status of degrees. Thanks to Christopher Piñon (p.c.) for discussion of this point.

In the same sense, the dimension of height gives us the preorder  $\preceq_{\text{height}}$ :

$$(23) \quad \langle w, x \rangle \preceq_{\text{height}} \langle v, y \rangle \text{ iff } y \text{ in } v \text{ is at least as tall as } x \text{ is in } w.$$

To derive degree predicates (e.g. *tall*, cf. Cresswell, 1976) as monotone (cf. Heim, 2000), I will not identify degrees with equivalence classes directly. Rather, I use them together with  $\preceq_{\text{height}}$  and construe the set  $H$  of degrees of height as in (24).<sup>11</sup>

$$(24) \quad \text{the set of degrees of height } H := \{ \{ \langle w, x \rangle \mid \langle v, y \rangle \preceq_{\text{height}} \langle w, x \rangle \} \mid \langle v, y \rangle \in W \times D_e \}$$

$d_{1.80m}$ :	$\langle w_1, g.w.bush \rangle, \langle w_2, s.holmes \rangle, \langle w_3, g.w.bush \rangle, \langle w_2, g.w.bush \rangle,$ $\langle w_3, s.holmes \rangle, \langle w_4, g.w.bush \rangle, \langle w_1, commerzbank - tower \rangle,$ $\langle w_2, empire - state \rangle, \dots$
$d_{1.90m}$ :	$\langle w_2, g.w.bush \rangle, \langle w_3, s.holmes \rangle, \langle w_4, g.w.bush \rangle,$ $\langle w_1, commerzbank - tower \rangle, \langle w_2, empire - state \rangle, \dots$
...	...
$d_{259m}$ :	$\langle w_1, commerzbank - tower \rangle, \langle w_2, empire - state \rangle, \dots$
...	...

Each degree  $d_i$  is a subset of  $W \times D_e$ , and can thus be characterized by a function  $\delta_i$  of type  $\langle s, et \rangle$ :

$$(25) \quad \text{For each } d_i, \text{ there is a function } \delta_i \in D_{\langle s, et \rangle}, \text{ s.t. } \delta_i(w)(x) = 1 \text{ iff } \langle w, x \rangle \in d_i. \\ \text{(notation: } \text{DEG}(\delta_i) = d_i.)$$

If an individual  $x$  is tall to degree  $d$  in world  $w$ , this means that  $\langle w, x \rangle$  is in the class called  $d$ . This ensures that degree predicates are downward monotone;  $d$ -tall entails  $d'$ -tall for any  $d' \leq d$ .

$$(26) \quad \begin{array}{l} \text{a. } \text{tall}_w(d)(x) \leftrightarrow \langle w, x \rangle \in d \\ \text{b. } \text{The tower is } d\text{-tall for } d = 259m. \\ \quad \therefore \text{The tower is } d'\text{-tall for } d' = 1m. \end{array}$$

Now that degrees can be construed as functions of type  $\langle s, et \rangle$  we obtain:

$$(27) \quad \begin{array}{l} \llbracket \text{the height of that building} \rrbracket(w) = \\ e: \quad \dots \text{the maximal degree of height } d \text{ s.t. } \text{tall}_w(d)(\text{that building}) \\ \langle s, et \rangle: \quad \dots \lambda w \lambda x. x \text{ is in } w \text{ at least as high as that building is in } w \end{array}$$

Given this conception of kinds and degrees as dual types, CS-08 adopt the following domain restriction for  $\text{amazing}_{\text{expl}}$  (in the following, I will often abbreviate this

<sup>11</sup>Here I am elaborating on and deviating from the very condensed sketch in CS-08. We could equally well identify degrees with the equivalence classes and make use of  $\preceq_{\text{height}}$  in the specification of degree predicates instead (replacing (26-a)).

restriction as  $\text{DUALTYPE}(x)$ .<sup>12</sup>

$$(28) \quad \llbracket \text{amazing}_{\text{expl}} \rrbracket = \lambda w \lambda x_{se} : \forall w' \exists P [x(w') = \text{DEG}(P)] \text{ or } \forall w' \exists P [x(w') = {}^\cap P]. [ \dots \text{value} \dots ]$$

Ideally, the value assigned should be related to the semantics of  $\text{amazing}_{\text{simpl}}$ .

### 3.2 *amazing* as having different properties

In section 2, we have seen that  $\text{amazing}_{\text{simpl}}$  behaves like an ordinary modifier and allows for substitution of extensionally equivalent expressions *salva veritate*. From that, we can conclude that it takes arguments of type  $e$ .

In CS-08, we try to find a common semantic core for  $\text{amazing}_{\text{simpl}}$  and  $\text{amazing}_{\text{expl}}$  that fits both ordinary individuals and (index-dependent) kinds/degrees. We spell it out as the metalanguage predicate **AMAZING**. It picks out the set of worlds that fulfill all the speaker's expectations and expresses that a certain  $x$  has different properties there from what properties  $x$  has in the actual world.<sup>13,14</sup>

$$(29) \quad \text{AMAZING}(w)(x) := \forall w' \in \text{Exp}_{\text{Speaker}}(w) [\{P \mid P_{w'}(x)\} \neq \{P \mid P_w(x)\}]$$

According to the generalization in (18), for  $\text{amazing}_{\text{simpl}}$ ,  $x$  has to be of type  $e$  (that is, it can combine with ordinary individuals, kinds or degrees). For  $\text{amazing}_{\text{expl}}$ ,  $x$  has to be of type  $\langle s, e \rangle$  and meet the **DUALTYPE**-requirement introduced above, that is, either it is a degree assigning individual concept, or it is a kind assigning individual concept.

This accounts for the substitution patterns observed in (7) vs. (8):  $\text{amazing}_{\text{simpl}}$  allows for substitution *salva veritate* of extensionally equivalent expressions, while  $\text{amazing}_{\text{expl}}$  does not. The infelicity of DPs that are rigid kind or degree denoting expressions can be explained in terms of blocking by  $\text{amazing}_{\text{simpl}}$ .

Of course, 'having different properties' from what is expected looks like a straightforward account for why an individual (or a particular kind) is amazing. Yet, it may not be obvious why 'having different properties' should give rise to the reading of degrees/kinds being different ones at the actual index of evaluation vs. at all worlds conforming to the speaker's expectations. At least certain neurotic properties have to be excluded by stipulation. For degrees, we argue that the properties in question are always of the sort of what  $x$  instantiate the gradable property to degree  $d$  at a given world, which entails that we are talking about

<sup>12</sup>Following the convention in Heim and Kratzer (1998), the domain restriction is indicated between a colon that follows the  $\lambda$ -bound argument variable and the dot preceding the value.

<sup>13</sup>Several people have pointed out that *amazing* is not the same as *surprising*. Maybe expectations should be replaced by stereotypical assumptions. As far as I can tell, the point is not crucial to my concerns here.

<sup>14</sup>In order to have such a fully uniform core for  $\text{amazing}_{\text{simpl}}$  and  $\text{amazing}_{\text{expl}}$ , we have to allow a shift from  $x_e$  to the corresponding constant individual concept.

a different degree.<sup>15</sup> Hence, for degree referring expressions like *the height of this building*, *amazing<sub>simpl</sub>* and are predicted to come out as synonymous, which might look satisfactory at first glance.

## 4 The monotonicity problem

The analysis in CS-08 looks promising as it captures the empirically established restrictions on the argument of *amazing<sub>expl</sub>* in a natural way and predicts the facts about index (in)dependence. Yet, there is reason to worry.

A maybe minor problem is related to the analysis in terms of sets of differing properties. Already with *amazing<sub>simpl</sub>*, we face the problem that not any old property should be taken into account. Apart from notoriously neurotic properties (e.g. being situated in a particular world  $w'$ ), more innocent looking ones have to be banned as well. From (30-a) it follows that the property ' $\lambda w \lambda x$ .people think in  $w$  that  $x$  is weird' holds of John, but was not expected to. Yet, (30-b) need not be true.<sup>16</sup>

- (30) a. It's amazing that people think John is weird.  
b. John is amazing.

Worse, the analysis has to resort to **monotonicity** in order to avoid overgeneration. Consider (31).

- (31) It's amazing the height of this house.

In CS-08 we discuss the worry that our semantics for *amazing<sub>expl</sub>* might predict (31) to be true because something other than the house is higher than expected. Assume that we do not have strong feelings about the height of this house, yet, we would have expected the church to be lower than the house. In fact, they are of the same height, namely  $d_{30}$ . In this scenario, *the height of this house* denotes different degrees at various expectation worlds, but at each of these worlds, it picks out a higher degree than *the height of this church* does. Therefore, at all expectation worlds  $w'$ , the property  $\lambda w \lambda d. \langle \text{church}, w \rangle \in d$  does not hold of the degree  $d'$  that is picked out by *the height of this house* in  $w'$ . Yet, at the actual world  $w_{@}$  this property does apply to the actual height of this house  $d_{30}$ . In CS-08, we argued that this needs to be blocked because amazement involves monotonicity. The intuition that monotonicity should play a role here is certainly correct. But instead of evoking monotonicity as an external principle to save the analysis, we need to derive it as a property of the *amazing<sub>expl</sub>*-construction.

If (31) is true, we conclude that any higher degree would be a source of

<sup>15</sup>Note that it gives rise to technical complications with *amazing<sub>simpl</sub>*.

<sup>16</sup>Independently, Rett (2008b) acknowledges her analysis to be besieged by this problem, too (p.152, fn 7). But not only speaker evaluative properties cause problems.

amazement as well. But not all occurrences of *amazing(ly)* are subject to this constraint (cf. Morzycki, 2004; Katz, 2005; Nouwen, 2005). Consider a scenario like (32) (along the lines of Morzycki, 2004):

- (32) scenario: *this house was built in 1865; due to heavy weather conditions, the soil got very wet and the building sunk a bit; we measure its ‘new’ height and discover it to be exactly 18m65cm.*

Clearly, in this scenario, the height of the house has a puzzling property, roughly ‘ $\lambda w \lambda d$ .the name of its height  $d$  in meters is the building date of the house in  $w$ ’; nevertheless, there is not expectation that the house should have been lower. Consequently, only non-monotone expressions are acceptable in the given scenario. Acceptability in a scenario like (32) induces the following classification:

- (33)
- |    |  |                     |
|----|--|---------------------|
| a. | The house is amazingly high.           | <i>montone</i>      |
| b. | Amazingly, the house is high.          | <i>non-monotone</i> |
| c. | The height of the house is amazing.    | <i>non-monotone</i> |
| d. | It’s amazing the height of this house. | <i>montone</i>      |

Note that despite our original intuitions, the interpretation of *amazing<sub>simpl</sub>* and *amazing<sub>expl</sub>* differs for degree properties: *amazing<sub>simpl</sub>* does not give rise to monotonicity of expectations (cf. Morzycki (2004)), but *amazing<sub>expl</sub>* does.

## 5 Solving the monotonicity problem

### 5.1 The disjunction

Given the above considerations, CS-08’s account needs to be revised. For the moment, I give up the quest for a common AMAZING-core and adopt a more straightforward analysis of *amazing<sub>simpl</sub>*. According to (34), it expresses unexpected behavior w.r.t. a particular contextually salient property  $P$ .

- (34)  $\llbracket \textit{amazing}_{\text{simpl}} \rrbracket =$   
 $\lambda w \lambda x_e. \exists P [P \text{ contextually salient} \ \& \ P_w(x) \ \& \ \forall w' \in \text{Exp}_{w, \text{Speaker}} [\neg P_{w'}(x)].$

Returning to our original intuitions for *amazing<sub>expl</sub>* (‘the height/kind/... is a different one than what we expected it to be’), (35) looks like the most straightforward interpretation.

- (35)  $\llbracket \textit{amazing}_{\text{expl}} \rrbracket = \lambda w \lambda x_{se} : \text{DUALTYPE}(x). \forall w'' \in \text{Exp}_{w, \text{Speaker}} [x(w'') \neq x(w)].$

Indeed, the predictions look good for the kind reading:

- (36) It’s amazing the kind of marine life that you will experience on a Galapagos vacation.

*≈ At all speaker-stereotypical worlds you experience a different kind of marine life.*

Nevertheless, for the degree case the analysis fails just like CS-08's property analysis. With (35), we have assimilated (37-a) to (37-b). But while the first is monotone, the second is not.

- (37) a. It's amazing the height of this house.  
 b. It's amazing that this house has the height it actually has.

Even if we have unified the type of the argument DP (thanks to CS-08's condition of DUALTYPE), we cannot come up with a strictly uniform value: degrees come with an order and require instantiation to a smaller degree (cf. (44)), kinds do not come with such an order and require simple inequality as in (35).

$$(38) \quad \llbracket amazing_{\text{expl}} \rrbracket = \lambda w \lambda x_{se} : \text{DUALTYPE}(x). \forall w'' \in \text{Exp}_{w, \text{Speaker}} [x(w'') < x(w)].$$

Of course, this is not a nice result. An attractive way out would be to come up with a nested construal of kinds, much along the lines of what we find with degrees.<sup>17</sup> At the moment, I do not see how to make it work. I will thus leave the re-ordering of kinds for further research. Instead, I will resort to a somewhat more conservative strategy arising from comparison of the account in CS-08 with the treatment of *wh*-exclamatives and nominal exclamatives in Rett (2008a,b).

## 5.2 Kinds induce slots for gradable properties

Rett (2008a) does not talk about *amazing*<sub>expl</sub>, but she deals with main clause *wh*-exclamatives, inversion exclamatives and nominal exclamatives. Remember that nominal exclamatives obey the same restrictions as DPs embedded under *amazing*<sub>expl</sub> (cf. section 2). Following assumptions in the literature,<sup>18</sup> Rett assumes that surprise as expressed in exclamatives can only target (extreme) degrees.<sup>19</sup> A *wh*-exclamative like (39) can be appropriate because (i) Mimi speaks a high amount of languages (the **amount reading**), or because (ii) Mimi speaks very exotic languages. It cannot express that Mimi speaks two particular languages different from what the speaker had expected (but without independently surprising properties).

- (39) (My,) What languages Mimi speaks!

<sup>17</sup>I'd like to thank Chris Potts (p.c.), who suggested to look for a solution along these lines.

<sup>18</sup>Cf. references in Rett (2008b).

<sup>19</sup>Note that this holds only for a formally identifiable class of exclamatives. Declarative clauses like *Sue wore orange shoes!* can be used as exclamations (i.e., expressions of surprise) without being subject to such a constraint.

The possible readings are exactly those observed for *amazing*<sub>expl</sub>. Yet, in CS-08 and above, reading (ii) is described as targeting the **kind** of languages Mimi speaks. In contrast, Rett (2008a) calls it the **gradable reading**. She assumes that the gradable reading requires the presence of a contextually given gradable property  $\mathbb{P}$  (here: being exotic) which holds to an unexpectedly high degree. Her argument runs as follows: *how*-questions are in principle ambiguous between asking for manner or for evaluation, cf. (40).

- (40) How does Buch ride his horse?
- a. **manner**: bare-backed, saddled,...
  - b. **evaluation**: beautifully, dangerously, clumsily,...

Only evaluations are gradable. For the corresponding exclamative in (41) only the evaluation reading is available, which follows if exclamatives can only be about degrees, but not about non-gradable things like manners (or kinds).

- (41) (My), How Buck rode his horse!

From this, Rett (2008a) concludes that all exclamatives express surprise with respect to an extreme degree. The semantics is spelt out in terms of an illocutionary force operator that constrains expressive adequacy. Note that Rett (2008a) assumes exclamatives to denote degree properties. For me, at an index, *the height of this house* would pick out the maximal degree to which the house is high; for her, it would select the set of degrees  $d$  such that the house is  $d$ -high.

- (42) DEGREE E-FORCE( $D_{\langle d, \langle s, t \rangle \rangle}$ ) is expressively correct in context C iff D is salient in C and  $\exists d. d > c_{\text{standard}}$ [the speaker is surprised that  $\lambda w. D(d)(w)$ ]<sup>20</sup>

Consequently, the putative kind readings have to be construed as gradable readings thanks to a contextually given gradable property  $\mathbb{P}$ . As Rett (2008a) herself observes, the distribution of such covert gradable properties is far from clear. In particular, unlike the amount reading she derives from another silent predicate QUANTITY, they have no parallel with (headed) relative clauses.

But this turns out to be a severe problem. NEs obey the same restrictions as *amazing*<sub>expl</sub>-DPs, hence, they have to contain a degree NP, or a relative clause. But nothing in Rett (2008a)'s analysis predicts the infelicity of (43-a) in contrast to (43-b) (which carries over to the corresponding *amazing*<sub>expl</sub>-clauses). Her framework does nothing to prevent the insertion of a contextually given gradable property  $\mathbb{P}$  which would save (43-a).<sup>21</sup>

<sup>20</sup>In contrast to Katz (2005) and Nouwen (2005), Rett (2008b) assumes that exclamatives require not only instantiation to a degree above the expectations, but also to a degree above the contextual standard. I find her arguments convincing.

<sup>21</sup>Note that QUANTITY cannot apply: it is independently motivated to combine with two properties ( $\lambda P \lambda d \lambda Q. \exists X [P(X) \ \& \ Q(X) \ \& \ \text{measure}(X) = d]$ ), so the relative clause is needed to fill the second property argument. A similar two-place semantics for the covert gradable

- (43) a. #The people from Italy!  
 b. The people who come from Italy!

In order to have our cake and eat it, I propose the following: Rett (2008a) is right in that amazement is always about degrees and not about kinds directly. But  $\mathbb{P}$  can only appear with kind-referring expressions. Hence, two steps are necessary to obtain the kind/gradable-reading of (39): first, the relative clause generates *kind of languages s.t. Mimi speaks languages of that kind*, then, a contextually given gradable property can be inserted. Given that, the entry for  $amazing_{\text{expl}}$  can be simplified to (44) while still predicting the restrictions observed.

$$(44) \quad \llbracket amazing_{\text{expl}} \rrbracket = \lambda w \lambda x_{se} : \forall w' \exists P [x(w') = \text{DEG}(P). \forall w'' \in \text{Exp}_{w, \text{speaker}} [x(w'') < x(w)]]$$

In the absence of a relative clause, neither QUANTITY nor  $\mathbb{P}$  can apply and (43-a) fails to denote a degree property/individual concept.

## 6 Conclusion

The proposal in CS-08 spells out the correct restrictions on what DPs can occur in expletive emotive constructions like *it's amazing*. Nevertheless, our uniform semantics for kinds and degrees fails to cope with the monotonicity properties that are observed with degree readings, but are inapplicable to kinds. In order to maintain a uniform account, I follow Rett (2008a) in treating putative kind readings as degree readings that involve covert gradable properties. Yet, in order to predict what DPs can appear under *it's amazing* or as NEs, I maintain the assumption that relative clauses are needed for shifts to amounts and kinds, and I argue that covert gradable properties can only be inserted with kinds.

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properties would be at odds with their other occurrences and their inability to occur in headed relative clauses.

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