A Degree Account of Exclamatives

I argue that matrix exclamatives are a type of degree construction, restricted to interpretations involving singular degree propositions. To account for this, I present a semantic and pragmatic account of exclamatives in which the differences between exclamatives and interrogatives can be attributed to their different illocutionary forces.

A notable fact about exclamatives is that they are morphologically and syntactically similar to interrogatives. This observation is robust cross-linguistically (Elliott 1974). (In (3a), 'CQ' is a concealed question.)

(1) a. How short is that building? b. How short that building is!
(2) a. Does she have a lot of money? b. (Boy), Does she have a lot of money!
(3) a. John knows [$_{CQ}$ the places you'll go.] b. (Oh), The places you'll go!

A natural account of exclamatives is one that correlates these morphological and syntactic similarities with a similarity in meaning. Specifically: exclamatives and interrogatives have the same denotation – a set of propositions – and differ only in their illocutionary force (IF). A question with interrogatory IF is an interrogative; a question with exclamatory IF is an exclamative. Such an account can explain the similarities shown above, but needs to be able to attribute any differences between exclamatives and interrogatives to their respective IFs.

The most straightforward implementation of this idea – like the one put forth in Zanuttini and Portner (2003) – is that syntactically related interrogatives and exclamatives have the same denotation, differing only in that (some of) the propositions denoted by the exclamative are surprising or remarkable in a given context. Such an account cannot be right, however, because it fails to capture the fact that exclamatives (unlike interrogatives) are restricted to degree interpretations: an exclamative cannot be used to exclaim that it is unlikely or surprising that a predicate holds of particular individuals. While the interrogative *What dorks does John know?* denotes a set of singular individual propositions (as in (4a) below), the exclamative *What dorks John knows!* can only denote a set of singular degree propositions (as in (4b)). With exclamatory force, it can communicate "The dorks John knows are dorky to a surprising degree" but not "It is surprising that John knows dorks A and B," which is a direct extension of the interrogative meaning. This is true even in a scenario in which John knows several dorks (A, B, C, D and E), all dorky to the same degree, but it's particularly surprising or noteworthy that he'd know A and B.

(4) a. $\lambda w' \lambda p \exists X [p(w') \land p = \lambda w.\text{knows}'(w)(j, X) \land \text{dorks}'(w)(X)]$
    b. $\lambda w' \lambda p \exists d, d > s_{dorky} [p(w') \land p = \lambda w \exists X [\text{knows}'(w)(j, X) \land \text{dorky}'(w)(X, d)]]$

This restriction to degree interpretations is a property of all matrix exclamatives, not just those headed by *what*. In English, exclamatives headed by *wh*-phrases that cannot quantify over degrees are ungrammatical (e.g. **Who John knows!*), while exclamatives with potentially ambiguous *wh*-phrases have only degree interpretations. Considering the denotation of its interrogative counterpart, the exclamative *How she rode that kicking mare!* might be thought of as involving quantification over manners (beautifully, clumsily) rather than the degrees associated with the gradability of a manner (beautifully to degree *d*). But the fact that it can only be felicitously uttered when the manner in which she rode the mare is gradable (beautifully but not bare-backed) supports the claim that the denotations of even these exclamatives are restricted to singular degree propositions, ones which involve quantification over degrees provided by a covert gradable adverbial.

I propose that the degree restriction can be attributed to exclamatory IF, maintaining the intuition that exclamatives and interrogatives have the same compositional semantics. 'E-Force,' the IF of exclamation, binds a pragmatic degree variable the propositions in the denotation of the exclamative and qualifies the speaker's expectation and knowledge.

A speaker utters an exclamative to express surprise (although this speech act may be performed insincerely). I follow Abels' (2006) analysis of the predicate *be surprised at* as a relation between the subject and two propositions: one which he expected to be true (p_e), one he knows to have actually come true ($p_@$). $p_@$ must be a mention-some answer in the denotation of the exclamative ('$\mathbb{E}$'), and p_e must be entailed by $p_@$ and must be compatible with a mention-some answer in $\mathbb{E}$. In binding a pragmatic degree variable in $\mathbb{E}$ (s_{dorky} in (4b)), E-Force ensures that the relevant set of degrees exceed a particularly high standard.

I assume that the pragmatic variable bound by E-Force is the same one in e.g. positive constructions like *John is tall*, which assert that John's height is high relative to a contextually relevant standard. Rett (to appear) refers to constructions with this meaning as 'evaluative,' and argues that evaluativity is contributed by a null morpheme EVAL, which can occur optionally in any degree construction.

(5) $[\![\text{EVAL}]\!] = \lambda D \lambda d . D(d) > s_i$, where s is a contextually-valued standard on scale i.

Matrix exclamatives, unlike other degree constructions, *require* that their denotations contain EVAL. Applying E-Force to a question without a pragmatic variable results in vacuous quantification. Support for this analysis comes in two forms.

1. There are reasons to attribute the degree restriction to E-Force, rather than some semantic aspect of exclamatives. First, the most likely candidate for an embedded exclamative is a complement of *is surprised at...* (Grimshaw, 1979). But the *wh*-clause in *Sue was surprised at what dorks John knows* can denote singular individual propositions (can mean that Sue is surprised that John knows A and B). Second, multiply-headed exclamatives are unacceptable (*How very tall how very many people are!*); this is because every utterance can have one and only one illocutionary force.

2. There are reasons to think that exclamatives require EVAL, or something like it. First, exclamatives are unacceptable when formed out of questions that are not evaluative. *How short is he?* is unambiguously evaluative; *How tall is he?* is not. The latter is degraded as an exclamative without an adverbial (*How (*very) tall you are!*). More stark is the following contrast: *What few/*many teeth you have!*. I argue that the presence of an extreme adverbial – disallowed in interrogatives for independent reasons (Abels, 2004) – signifies that a construction is evaluative, which explains these polarity contrasts.

Second, a subclass of Catalan exclamatives (headed by *quin*) require one of two overt degree morphemes: *tan* ('so') or *més* ('more') (Castroviejo Miró, 2006). These morphemes are similar to EVAL in that they introduce into the derivation a standard of comparison that can be valued contextually. We can surmise that this is a general requirement on exclamatives; Catalan requires that this standard is introduced overtly, English does not.

In sum, I can correlate the semantic restrictions of matrix exclamatives to the nature of exclamatory IF. The explanation of other differences between interrogatives and exclamatives – the acceptability of extreme adverbials in exclamatives but not interrogatives, the restriction on the types of *wh*-phrases in English exclamatives, and the presence of overt degree morphemes in e.g. Catalan exclamatives – follow from this characterization of E-Force.