Pitch accent, focus, and the interpretation of non-*wh* exclamatives in French*

Heather Burnett
University of California Los Angeles

This paper examines the cross-linguistic realization of the class of *exclamatives* in the Romance languages. I argue that, while the syntactic and semantic properties of exclamative sentences are usually viewed as being licensed by *wh*-morphology, other grammatical features such as *f(ocus) marking* may serve a similar purpose in the construction of exclamative meaning. In particular, I argue that exclamations with focused gradation quantifiers, such as the Québec French sentence *J'ai vu un film ASSEZ bon!* "I saw SUCH a good movie!" display many of the same semantic properties that have been observed with *wh*-exclamatives. I propose that the semantic content of this new type of exclamative is a gradation construction with an implicit threshold clause and focus on the quantifier. I propose that the exclamative operator binds the threshold yielding an extreme degree reading, and that the presence of this operator is licensed by the focus structure of the sentence.

1. Introduction

This paper examines the cross-linguistic realization of the class of *exclamative* sentences, with a special focus on French and other Romance languages. It is well known that, although almost all utterances can be used in the act of exclaiming, certain utterances are syntactically and semantically tied to this use. For example, if I am surprised at the fact that you got your hair cut, I can express this by using the relevant assertion, the French sentence in (1a), with a particular exclamatory intonation (1b).

---

(1)   a.   *Tu   t'es   fait   couper les   cheveux.*
           You CL-have   made   cut   the hair
           "You got your hair cut."

      b.   *Tu t'es fait couper les cheveux!*
           "You got your hair cut!"

However, some utterances are infelicitous in non-exclamative contexts. These are known as *exclamative* sentences, and, as discussed in many works such as Michaelis & Lambrecht (1996), Zanuttini & Portner (2003), and Rett (2009), these utterances have particular semantic and pragmatic properties, which will be discussed over the course of this paper. Some examples of sentences that have previously been argued to belong to the exclamative class in French are shown in (2).

(2)   a.   *Qu'est-ce   qu'ils   sont beaux, tes   cheveux!*
           What-is-it that-they are   nice,   your hair

      b.   *Qu'ils   sont beaux, tes   cheveux!*
           What-they are   nice,   your hair

      c.   *Ostie qu'ils   sont beaux, tes   cheveux!*   (Québec French)
           Ostie that-they are   nice, your hair
           "How nice your hair is!"

In most current theories of the syntax and semantics of exclamative sentences, the force of an utterance used in the act of exclaiming is given by an exclamative illo-cutionary force operator (ex. Zanuttini & Portner's *F(active)* morpheme, and Rett's Degree E-FORCE). In order to apply, these operators require a specific semantic and discourse structure, and this is licensed by particular syntactic configurations. By far, the most studied of these configurations is the *wh*-morphology in *wh*-exclamatives such as those in (2a,b). In fact, some authors have even argued that exclamatives, by definition, contain *wh* morphology (cf. Obenauer (1994) for French).

   In this paper, I argue that the exclamative operator can be licensed by other means. In particular, I argue that it can be licensed by prosody, more specifically, by contrastive focus on a certain class of non-*wh* items with the proper semantics. These elements are gradation quantifiers. Following Heim (2000), I call *gradation quantifiers* those quantifiers that compare the degree to which a property holds of an individual with a "standard" degree or "threshold" specified by a consecutive clause. The set of English gradation quantifiers includes *too…for*, *so…that*, and *enough…for*.

   Furthermore, I argue that, while gradation exclamatives are not unheard of in languages like English, they constitute a robust class of exclamatives in the Romance languages. In most of what follows, my data will come from Québec French (QF), where the construction in question is widespread; however, as will be discussed below, we find similar patterns in European French, Italian, and Spanish.

The main goal of my paper is the analysis of the following paradigm of utterances containing gradation quantifiers, exemplified here by *assez* "enough":

(3)   a.   *J'ai lu un livre **assez** difficile (pour moi).*   **Assertion**
           "I read a book difficult **enough** (for me)"

      b.   *J'ai lu un livre **ASSEZ** difficile (pour moi)…pas TROP difficile.*
                                                                                Contrastive Focus
           "I read a book difficult **ENOUGH** (for me)…not TOO difficult"

      c.   *J'ai lu un livre **assez** difficile (pour moi)!*   **Exclamation**
           "I read a book that difficult enough for me!"

      d.   ***J'ai lu un livre ASSEZ difficile!***   **Exclamative**
           "I read SUCH a difficult book!/What a difficult book I read!"

(3a) is a simple assertion: it communicates the fact that I read a book that was difficult enough for me. (3b) is another assertion, but one with contrastive focus on *assez*. It states that I read a book difficult enough, and contrasts the degree of the book's difficulty with another degree already in the common ground: in this case, the degree of being "too" difficult. (3c) is an exclamation similar to (1c): it expresses the speaker's surprise at the fact that I read a book that was difficult enough for me (perhaps books are usually too easy). Finally, (3d), I will argue, is an exclamative: it expresses surprise at the degree of the book's difficulty, namely, that it is extreme.

   The heart of my proposal concerns the relation between (3b) and (3d): I argue that what assertions with *f(ocus)*-marked gradation quantifiers have in common with gradation exclamatives, and exclamatives more generally, is their presuppositions: In order to be felicitous, both contrastively focused gradation constructions and exclamatives require that a degree property be salient in the common ground. Following Rett (2009), I assume that this is a precondition on the application of exclamative operator, one that is met in the case of exclamatives and focused gradation constructions, but not in many other constructions.

   The paper is organized as follows: In Section 1, I present the basic data on the use of gradation constructions in assertions with and without focus. I present the main proposals from the literature that I adopt for the analysis of the semantics of gradation quantifiers and contrastive focus. In Section 2, I examine gradation constructions used in the act of exclaiming. Following Rett, I argue that unfocused gradation constructions used in these contexts are simple exclamations: they express surprise on behalf of the speaker at a proposition in the common ground. I then examine sentences used in the act of exclaiming with focused gradation quantifiers. I propose that these utterances form part of a special subclass of exclamations: exclamative sentences. I apply both Portner & Zanuttini (2003)'s and Rett (2009)'s semantic critera for identifying exclamatives, and show that, despite their lack of *wh*-morphology, exclamations with focused quantifiers satisfy them. Finally, in Section 3, I present a semantic analysis

of these gradation exclamatives, and show how it explains two puzzling properties of the construction.

2.   Gradation quantifiers in assertions

In theories that take into account the communicative function of an utterance (for example Searle (1969)), its meaning is often divided into two components: the *semantic content* of an utterance, and the *illocutionary force* with which it is uttered. The semantic content of an utterance is, in simplest terms, its denotation: it is the value that is obtained by combining the various lexical items that constitute the expression together by means of compositional semantic rules like *function application* etc. The illocutionary force of an utterance has to do with the intention of the speaker: an expression that is uttered with the speaker wishing to communicate its truth is known as an *assertion*. Assertions can be descriptively correct or incorrect, i.e. true or false.

In this section, I present the basic data on the use of gradation quantifiers in assertions in Québec French and other Romance languages, and the analysis of their semantic content that I am adopting. I then consider the sentences in which they are focused, and present the semantic analysis that I am adopting for *contrastive focus* (CF).

2.1   Assertions with no focus

As mentioned in the introduction, gradation quantifiers compare the degree to which a property, introduced by an adjective, holds of an individual with a threshold degree given by a consecutive clause. Assertions containing non-focused gradation quantifiers in Québec French are shown below with the quantifiers *tellement…que* "so much… that", *assez…pour* "enough…for", and *trop…pour* "too much…for".

(4)   a.   J'ai lu un *assez* bon livre *pour l'acheter.*
            "I read a book on this subject good *enough to buy it*"

       b.   J'ai lu un livre *tellement* difficile *que j'ai commence à pleurer.*
            "I read a book *so* difficult *that I started crying*"

       c.   J'ai lu un livre *trop* difficile pour *l'apprécier.*
            "I read a book *too* difficult *to appreciate it*"

Formally, following von Stechow (1984), I assume that gradeable adjectives like *difficile* "difficult" denote relations between individuals and degrees. Thus, we can represent the denotation of *difficile* as the function in (5).

(5) $[[\text{difficile}]] = \lambda d_d \lambda x_e. \, x$ is d difficult

difficile takes a degree and an individual and yield "true" just in case the individual is difficult to that degree. Gradation quantifiers take a threshold degree to form a

generalized quantifier over sets of degrees. Denotations for *assez* "enough", *trop* "too" and *tellement* "so" in a model M under an assignment function α, are shown in (6).

(6) a. $[[assez…pour]]^{M,α} = λd'_d λP_{\langle d,t \rangle}. \max^1(P) ≥ d'$ and $d' = \min(\{d:$ it is required for² $P(d) = 1\})$

   b. $[[trop…pour]]^{M,α} = λd'_d λP_{\langle d,t \rangle}. \max(P) ≥ d'$ and $d' = \max(\{d:$ it is allowed for $P(d) = 1\})$

   c. $[[tellement…que]]^{M,α} = λd'_d λP_{\langle d,t \rangle}. \max(P) ≥ d'$ and $d' = \min(\{d:$ it is required for $P(d) = 1\})$

The quantifier *assez…pour*, for example, states that the maximum degree in a degree property P is greater than (or equal to) another degree, and this degree is the minimum that is required for the property to hold. So, under this account, the truth conditions for a sentence like (7a) are as shown in (7b), i.e. the sentence is true just in case John's handsomeness is greater than or equal to the handsomeness that is required to date Marie.

(7) a. *Jean est assez beau pour sortir avec Marie.*
      "Jean is handsome enough to date Marie."

   b. 1 iff $\max(\{d:$ Jean is d handsome$\}) ≥ d_{\text{date Marie}}$

Although gradation quantifiers canonically select for an overt consecutive clause, if the threshold of comparison can be recovered from context, the *that/for* clause may be left unpronounced.

(8) *Le prof m'a demandé de lire un livre qui était assez difficile.*
   "The teacher asked me to read a book that was difficult enough."

---

1. As discussed in Rullman (1995), the proper truth conditions for sentences with comparatives and gradation quantifiers are given through comparing the maximum degree to which a property holds with another degree. Since *assez, trop* etc. apply to sets of degrees, we must make use of a maximality operator such as in (i).

(i) Let DEG be a set of degrees ordered by the relation ≥,
   the $\max(\text{DEG}) = ιd[d ϵ \text{DEG} $ and for all $d' ϵ \text{DEG} [d' ≤ d]]$ (Rullman (1995: 68))

2. It is well known that the quantifiers *so, too,* and *enough* and their French and Italian translations involve some type of modality inside the consecutive clause (cf. the discussion in Meier (2003)). In fact, it is in the formalization of the modal in the subordinate clause that the majority of the proposals for the semantics of gradation quantifiers differ. Since, as we will see, the semantic content of the consecutive clause is not going to be of particular importance in the phenomenon that we are analyzing here, in the definitions provided in (6), I have simply stated this modality in English words. For alternative proposals for the semantics of the consecutive clause, see, among others, von Stechow (1984), Heim (2000), Meier (2003), and Harquard (2006).

(8) is good when a phrase headed by *pour,* for example *pour moi* "for me", is straight-forwardly supplied by the discourse context. Formally, I represent the filling in of the threshold from context as the insertion of a free variable, say d_1, as the first argument of the quantifier.

(9) $[[\text{J'ai lu un livre assez difficile}]]^{M,\alpha} = 1$ iff max($\{d: \text{I read } d \text{ difficult book}\}$) $\geq \alpha(d_1)$

The truth of (9), where the value of the threshold is implicit, is dependent on the value assigned to d_1 by the assignment function α.

Québec French also contains a number of gradation quantifiers that obligatorily take an implicit threshold, i.e, the value to which the degree of the main predicate is compared is always supplied by context. An example of such a quantifier is *pas mal* "fairly".

(10)   J'ai lu un livre qui était *pas mal* difficile.
"I read a book that was *fairly* difficult."

Like *assez,* quantifiers like *pas mal* relate degree properties with threshold degrees. However, the latter are lexically specified to take implicit variables as threshold arguments. Thus, the lexical entry for *pas mal* can be directly given as (11).

(11) $[[\text{pas mal}]]^{M,\alpha} = \lambda d_d \lambda P_{\langle d,t\rangle}. \text{max}(P) \geq \alpha(d)$

A sentence like *J'ai lu un livre qui était pas mal difficile* is true just in case α maps d to the degree to which a book needs to be difficult in order to count as "fairly" difficult, and the degree to which the book that I read is difficult exceeds the value of d.

In summary, I have followed the majority of the literature on comparatives and gradation quantifiers in supposing that they combine with a threshold supplied by a consecutive clause to form a generalized quantifier over degrees: a function from a degree property to a truth value. When the threshold is recoverable from context, or when the threshold is lexically specified to be implicit, I suppose that the quantifier takes a free variable as its first argument, and its value is given by an assignment function.

2.2   Assertions with focused gradation quantifiers

I now turn to assertions in which these quantifiers are focused, or f-marked. By *focus/f-marking*, I simply mean pitch accent (stress) on the quantifier. As shown in (12), asserting a proposition with stress on the degree quantifier results in contrastive focus (CF) on the quantifier.

(12)   Le prof m'a demandé de lire un livre qui était ASSEZ difficile pour moi…pas TROP difficile.
"The teacher asked me to read a book that was difficult ENOUGH for me…not TOO difficult"

Again, the consecutive clause may be dropped if it is clear from context.

(13)   Le prof m'a demandé de lire un livre qui était ASSEZ difficile…pas TROP difficile.
        "The teacher asked me to read a book that difficult ENOUGH…not TOO difficult"

In the analysis of contrastive focus, I follow much recent work that proposes that, in a sentence with focus marking, it is the destressed material, not the stressed material, that is semantically marked. In particular, I assume that this unstressed material must be *given* (Selkirk (1996), Schwarzschild (1999)) or *anaphoric* to the context (Büring (2008)). This is stated as the generalization in (14).

(14)   The absence of *f*-marking indicates giveness in the discourse. (Schwarzschild
        (1999; his (10b)))

Schwarzschild gives the following definition of *giveness*:

(15)   An utterance U counts as **GIVEN** iff it has a salient antecedent A and A entails
        U modulo ∃-type shifting. (Schwarzschild (1999; his (18))

In other words, for sentences with *f*-marked constituents to be well formed, they must have antecedents in the discourse that are composed of the non-*f*-marked constituents of the sentence. Therefore, in a sentence with a focused gradation quantifier, for the truth of the entire sentence to be evaluated, the degree property that forms the argument of the focused quantifier must be salient in the discourse. For example, focus on *assez* in (16a) requires that the book's difficulty (i.e. the property: *λd. I read a book d-difficult*) be salient in the discourse. The meaning of (16a) would then be a function from worlds in which we have been talking about the difficulty of a book that I read (the presupposition is indicated by square brackets ([])) to truth values (16b).

(16)   a.   J'ai lu un livre ASSEZ difficile.
              "I read a book difficult ENOUGH"

        b. $\lambda w.$ [$\lambda d\ \lambda w'.$ *I read a book d-difficult in w' is salient in the discourse*]
              $assez(\alpha(d'))(\lambda d.\ I\ read\ a\ book\ d\text{-}difficult) = 1$ in w.

2.3   Summary

In summary, in the spirit of von Stechow (1984) *inter alia*, I assume that gradation quantifiers denote relations between degrees: they relate the maximum degree to which the main predicate holds to a threshold degree that can be overtly specified (in the case of *assez, tellement,* and *trop*). Thus, when the threshold is overtly specified, the gradation construction denotes a closed proposition, and when the threshold is given by context, it denotes an open proposition, i.e. a proposition with one free variable of type *d*.

    Following Schwarzschild (1999) *inter alia*, I assume that the role of focus is to mark "new" information. In particular, I assume that, when a constituent smaller than the entire sentence is *f*-marked, the remaining part of the sentence must be *given*, i.e. salient

in the previous discourse. In the case where the gradation quantifier is *f*-marked, what must be salient in the discourse is a degree property.

3.   Gradation quantifiers in exclamations

In this section, I present the data on unfocused and focused gradation quantifiers in utterances used in the act of exclaiming. In other words, I consider what happens when we utter an expression denoting a proposition containing a gradation quantifier with the illocutionary force as an exclamation.

3.1   Exclamations with no focus

In this section, I examine utterances used in the act of exclaiming containing unfocused gradation quantifiers. As is standard, I take the act of "exclaiming" to be the expression of surprise on behalf of the speaker.[3] The first type of exclamation is the simple *propositional exclamation:* when the speaker expresses surprise at the truth of a particular proposition. In English and French etc. these exclamations are simply indicated by uttering the entire expression with exclamational intonation. An example of such an exclamation formed from a gradation construction is shown in (17).

(17)   *J'ai lu un livre qui était assez difficile pour moi!*
           "I read a book that was difficult enough for me!"

Following Kaplan (1999) and Rett (2009), I assume that, while assertions are descriptively (in)correct (true/false), exclamations are expressively (in)correct. Rett provides the following "expressive conditions" for exclamations:

(18)   "We now have two requirements for what makes the utterance of an
           exclamation expressively correct: its content must be salient, and the
           speaker must find this content surprising in some way"   (Rett (2009: 3))

Thus, the expressive correctness of an utterance is given by the illocutionary operator PROPOSITION E-FORCE, which is a function from a proposition in the conversational background to a speaker's expression of surprise.

(19)   PROPOSITION E-FORCE(p) is expressively correct in context C iff p is salient
           in C, and the speaker in C is surprised that p.   (Rett (2009; her (15)))

So PROPOSITION E-FORCE applied to the proposition *J'ai lu un livre assez difficile pour moi* yields the exclamation in (17), which is expressively correct just in case the

---

3.   There are many apparent counter examples to this claim; however, I refer the reader to the discussion in Zanuttini & Portner (2003) and Rett (2009) for arguments that surprise is, truly, the right notion.

proposition that I read a book difficult enough for me is salient in the context, and the speaker is surprised at this fact.

In the next sections, I examine the use of gradation constructions with focused quantifiers to express speaker surprise. I argue that these utterances are more than simple exclamations; rather, they form part of the class of *exclamatives* in French. However, I first review the literature on the criteria for classifying utterances as *exclamatives.*

3.2   Identifying exclamatives

Propositional exclamations are completely general: PROPOSITION E-FORCE may be applied to any proposition to create one, provided that this proposition is associated with surprise on behalf of the speaker; however, different types of exclamations are more restricted. In particular, *exclamatives,* utterances of the type shown in (20), have a number of syntactic and semantic restrictions that do not apply to propositional exclamations.

(20)   *Comme t'as de beaux cheveux!*
       "What nice hair you have!"

For Rett, what distinguishes exclamatives from other exclamations is that, as noticed by Milner (1978) and Gérard (1980), the former are subject to the following semantic restriction that the latter are not:

(21)   **The (Extreme) Degree Restriction:** Exclamatives may only express the surprise of the speaker at the extreme *degree* to which a property holds.

While an exclamative like *What languages Mimi speaks!* (in French: *Quelles langues qu'elle parle, Mimi!*) is appropriate to express surprise at the degree of difficulty or "exotic-ness" of the languages that Mimi speaks, it is inappropriate to express surprise at what those individual languages are. For example, consider the following scenario described by Rett: You've heard that Mimi speaks two Romance languages in addition to speaking English. You know that Mimi's mother is Swiss, and so you assume that these two languagse are French and Italian. However, you learn that Mimi instead speaks Portugese and Romanian. In this case, the propositional exclamation in (28a) is expressively correct; however, the exclamative is not (22b).

(22)   a.   (Wow), Mimi speaks Portugese and Romanian!
            ((*Wow), Mimi parle le portugais et le roumain!*)

       b.   #(My), What languages Mimi speaks! (Rett (2009: 5),
            (Quelles langues qu'elle parle, Mimi!)

To account for this defining characteristic of exclamative clauses, Rett proposes that the illocutionary force operator applies not to propositions in exclamatives, but rather to degree properties that are salient in the discourse. Thus, for Rett, the semantic

content of an exclamative is a function from degrees to propositions, and the exclamative operator, DEGREE E-FORCE, applies to these degree properties.

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

Thus, in Rett's theory, "the utterance of an exclamative is expressively correct if its content is a degree property 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*" (Rett (2009: 11)).

Zanuttini & Portner (2003) provide two[4] other criteria for distinguishing exclamatives from simple exclamations. Firstly, they propose that, since like Rett, they propose that the semantic content of an exclamative is presupposed, i.e. already in the common ground, they may only be appear in factive contexts.[5] For example, while English exclamatives can be embedded under *know*, they are ungrammatical under non-factive verbs like *think* and *wonder*.

(24) Mary knows/*thinks/*wonders how very cute he is.

Zanuttini & Portner's second criterium is that exclamative sentences are illicit in both parts of question/answer pairs. As shown below (25a), for an utterance with a *wh* word to be a question, inversion must take place. If there is no inversion, the utterance must be an exclamative (25b).

(25) a. *Quel   homme a-t-elle   épousé?*
          Which   man   has-she married
          "Which man did she marry?"

      b. *Quel   homme (qu') elle a   épousé!*
          Which   man   (that) she   has   married
          "What a man she married!"

Additionally, using an exclamative to answer a question is bizarre.

---

4. They actually provide three criteria, but their third one is sufficiently similar to Rett's extreme degree restriction.

5. This observation needs to be refined somewhat, in particular to *upward monotone factive contexts*. Note that a downward monotone operator like *regrets* does not license a *wh*-exclamative, nor does it license a degree quantifier exclamative either.

(i) a. *Mary regrets how very cute he is!
     b. *Mary regrets that he did SO much work!

(26)   A: *Est-ce qu'elle a épousé un homme impressionnant?*
             "Did she marry an impressive man?"

        B: *#Quel homme (qu')elle a épousé!*
             "# What a man she married!"

3.2.1   *Gradation exclamatives*

With these properties in mind, I consider exclamations with a focused gradation quantifiers such as (27).

(27)   *J'ai   lu   un livre ASSEZ   difficile!*
       I-have read a book ENOUGH difficult
       "What a difficult book I read!"

I argue that these constructions display the same properties that Rett and Zanuttini & Portner have noticed with wh-exclamatives. Firstly, exclamations with focused gradation quantifiers display Rett's *extreme degree restriction*: Clearly, the speaker's surprise may only be about the degree to which the adjectival property holds. Additionally, this degree must be "extreme". For example, suppose Jean is very ugly and, as such, we expect him to marry an ugly girl. If it turns out that he marries someone moderately beautiful, we cannot say (28), even though this fact is surprising.

(28)   *#Jean a   épousé   une fille ASSEZ   belle!   …mais elle était pas*
       Jean has married a   girl ENOUGH beautiful! …but   she   was   not
       extrêmement belle.
       extremely   beautiful

       "# Jean married SUCH a beautiful girl!…but she wasn't extremely beautiful"

Secondly, exclamations with focused quantifiers may only be embedded in contexts where the truth of the proposition containing the quantifier is presupposed or asserted. For example, *ASSEZ* is only possible with the factive *savoir* "to know" (29a), or *c'est vrai* "it's true".

(29)   a.   *Marie sait   que Jean a   épousé   une fille ASSEZ   belle!*
            Marie knows that Jean has married a   girl ENOUGH beautiful
            "Marie knows that Jean married SUCH a beautiful girl!"

        b.   *C'est vrai que Jean a   épousé   une fille ASSEZ   belle!*
            It's   true that Jean has married a   girl ENOUGH beautiful
            "It's true that Jean married SUCH a beautiful girl!"

        c.   **?Marie se demande si Jean a   épousé   une fille ASSEZ   belle!*
            Marie CL wonders if Jean has married a   girl ENOUGH beautiful
            "*? Marie wonders if Jean married SUCH a beautiful girl!"

        d.   **Marie pense   que Jean a   épousé   une fille ASSEZ   belle!*
            Marie thinks that Jean has married a   girl ENOUGH beautiful
            "*Marie thinks that Jean married SUCH a beautiful girl!"

Finally, focused gradation constructions are impossible in questions (30), and are somewhat bizarre when used as answers (31).

(30)   a.   *Jean, il   a-tu   épousé   une fille ASSEZ   belle? (Yes/No Question)
             Jean, he has-Q married a   girl ENOUGH beautiful
             "*Did Jean marry SUCH a beautiful girl?"

       b.   *Qui   a   épousé   une fille ASSEZ   belle?   (Wh-Question)
             Who has married a   girl ENOUGH beautiful
             "*Who married SUCH a beautiful girl?"

(31)   A: Jean, il a-tu épousé une belle fille?
             "Did Jean marry a beautiful girl?"

       B: ?Jean, il a épousé une fille ASSEZ belle!
             "Jean married SUCH a beautiful girl!"

In conclusion, I have argued that sentences with focused gradation quantifiers conform to the semantic criteria for identifying exclamatives proposed by both Zanuttini & Portner (2003) and Rett (2009). I therefore propose that this construction, that I will henceforth refer to as the *gradation exclamative* construction, constitutes a new class of exclamatives, one that does not involve *wh*-words.

In the next section, I show that gradation exclamatives have two rather puzzling semantic and syntactic properties that distinguish them from assertions with contrastively focused gradation quantifiers. Thus, not only do gradation exclamatives have many similarities with wh-exclamatives, they also display many differences from regular and contrastively focused assertions.

3.3   Additional syntactic and semantic properties of gradation exclamatives

In addition to displaying similar semantic properties to *wh*-exclamatives, gradation exclamatives further distinguish themselves from assertive gradation constructions in both a semantic way and a syntactic way.

3.3.1   *Semantic neutralization*

The most striking property of gradation exclamatives concerns the semantic behaviour of the gradation quantifiers that participate in this construction. In the previous parts of the paper, I have illustrated the construction using the quantifier *assez* "enough", which, in its normal assertive use means "sufficiently…for". In an assertion with contrastive focus, it keeps this meaning. However, as shown in all the examples in the previous section, when focused in an exclamation, it means "extremely".

The change in the meaning of *assez* is not limited to this lexical item. In fact, in Québec French, all of the gradation quantifiers *assez, trop* 'too", *tellement* "so", and *pas mal* "fairly", mean "extremely" when used in a gradation exclamative.

(32)   a.   *Marie est ASSEZ   belle!*
            Marie is   ENOUGH   beautiful

       b.   *Marie est TROP belle!*
            Marie is   TOO   beautiful

       c.   *Marie est TELLEMENT belle!*
            Marie is   SO   beautiful

       d.   *Marie est PAS MAL belle!*
            Marie is   FAIRLY   beautiful
            "Mary is SO beautiful!/How beautiful Mary is!"

We find a similar pattern of semantic neutralization in Italian: my speaker tells me that all four quantifiers *talmente, tanto* "so", *troppo* "too", and *abbastanza* "enough" all mean "extremely" when focused in an exclamation.

(33)   a.   *Mario è TALMENTE bello!*
            Mario is SO   handsome

       b.   *Mario è TANTO bello!*
            Mario is SO   handsome

       c.   *Mario è TROPPO bello!*
            Mario is TOO   handsome

       d.   *Mario è ABBASTANZA bello!*
            Mario is ENOUGH   handsome

However, there seems to be significant dialectal and cross-linguistic variation in which quantifiers can participate in the construction:[6] while almost all gradation quantifiers in Québec French and Italian are neutralized into meaning "extremely" when focused in an exclamation, the only quantifiers that can appear in gradation exclamatives in European French (34), Spanish (35) and English (36) are those that mean, roughly, *so*:[7]

(34)   a.   *Elle fut SI   serviable!*   (European French (Gérard (1980:3)))
            She   was SO obliging!

       b.   *C'est TELLEMENT extraordinaire!*
            It's   SO   extraordinary!

       c.   *Il nous a   fait TANT   de peine!*
            They   gave us   SO MUCH sadness!

---

6.   And indeed, within a single language, why some quantifiers like *assez* can participate in the construction, but other similar ones like the comparative *plus* 'more', at this point, remains mysterious.

7.   However, for some speakers of English, *rather* also fits this pattern: *Hey, that turned out to be a RATHER good film.*

(35)   *Ayer   leí   un libro TAN bueno!*   (Spanish)
     Yesterday (I) read a   book SO   good!

(36)   a.   John is SO tall!
     b.   John is SUCH a tall man!

However, some speakers of European French and English also accept the following examples with *too/trop*:

(37)   a.   C'est TROP bien![8]
     b.   That's TOO good!

In summary, gradation exclamatives have different semantic properties from contrastively focused gradation constructions. In particular, with quantifiers that do not have an "extreme" meaning, their meaning becomes extreme.

    In principle, the quantifiers presented in this section are not the only ones that can form gradation exclamatives. Other elements in QF like the swear word *crissement* "lit. christly" and the adverb *énormément* "enormously" work very well in exclamatives.

(38)   a.   *Ta   robe   est CRISSEMENT belle!*
       Your dress is   CRISSEMENT   beautiful
       "Your dress is SO beautiful!"

     b.   *Ta robe est ÉNORMÉMENT belle!*
       "Your dress is ENORMOUSLY beautiful!"

However, since these quantifiers already have an extreme meaning, we do not immediately see their semantic neutralization.

3.3.2   *Syntactic neutralization*

The second property that distinguishes gradation exclamatives from contrastively focused assertions was first noticed by Gérard (1980) for European French. Recall that, in CF assertions, the consecutive clause selected for by *assez, tellement,* and *trop* may be either overt (*Jean est ASSEZ beau **pour sortir avec Marie** '*Jean is handsome ENOUGH to date Mary'), or left implicit if it is recoverable from context. Gérard observes that when a gradation construction is used in an exclamation, it becomes an *énoncé tronqué* "truncated utterance" (Gérard (1980: 3)): that/for *must* be implicit.

(39)   a.   *J'ai   lu   un ASSEZ   bon   livre! *pour…*
       I-have read a   ENOUGH good book for…

---

8.   cf. Rapper *Fatal Bazooka*'s 2007 hit *J'aime trop ton boule!*

    b.   *J'ai   lu   un TELLEMENT bon   livre! *?que…*
            I-have read a   SO   good book   that…

    c.   *J'ai   lu   un TROP bon   livre! *pour…*
            I-have read a   TOO good book for

In other words, despite the fact that *tellement, assez,* and *trop* all select for their different consecutive clauses, when used in a gradation exclamative, they all become like *pas mal*, that obligatorily takes an free variable as a threshold. This syntactic neutralization of gradation quantifiers is also observed in Italian (40a), Spanish (40b), and English (40c).

(40)   a.   *Mario è   TROPPO bello   *per…*
            Mario is TOO   handsome *to…

      b.   Ayer,   leí   un libro TAN bueno *que   decidí   comprarlo!
           Yesterday, (I) read a   book SO   good *that (I) decided to buy it!

      c.   John is SUCH a tall man *that he can dunk a basketball!

In summary, unlike gradation constructions with contrastive focus, where the consecutive clause that specifies the threshold may only be left implicit if it is straightforwardly recoverable from the context, gradation exclamatives may not take an overtly specified threshold.[9] Intuitively, this is because, in the exclamative, threshold degree must always be surprisingly extreme, and there is no consecutive clause that can properly denote this degree. I formalize this intuition when I present my semantic analysis of gradation exclamatives in the next section.

4.   A semantic analysis of gradation exclamatives

In Section 3.2, I argued that gradation exclamatives display many of the same semantic properties as *wh*-exclamatives, properties that have been attributed to the presence of an exclamative illocutionary operator, such as Rett's DEGREE E-FORCE, the definition of which is repeated below.

---

9.   The judgements on the possibility of having a consecutive clause with the focused quantifier *so* are a little tricky: this is because, unlike *too* or *enough*, in order for an assertion of the form *so P that Q* to be true, *P* has to independently be true. For example, *John is so tall that Q* entails that John is tall. Therefore, it is easy to add an overt consecutive clause like *that it's surprising* to construct an assertion that has a similar content to the exclamative. The point here is not whether, if we change the intonation of the utterance, it is possible to include an overt standard that is, itself, extreme; it's that, in the basic uses of these quantifiers in exclamatives, the threshold is not coming from the previous discourse, but rather from the act of exclaiming itself.

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

I therefore propose that it is this operator that appears in gradation exclamatives to give them the extreme degree interpretation that we have seen in the previous sections of the paper.

Unlike PROPOSITION E-FORCE, that is allowed to apply to any structure whose semantic content is a proposition, and therefore has a very wide distribution, the distribution of DEGREE E-FORCE is more restricted: it only applies to degree properties, and then, only when there is an appropriate degree property salient in the discourse. There are very few syntactic/discourse configurations that meet this description. According to Rett, *wh*-exclamatives are one of them. I propose that sentences with contrastively focused gradation quantifiers with implicit thresholds are another.

Firstly, as shown in (41), the exclamative operator must apply in contexts in which there a degree property is already present in the common ground. As discussed in Section 3.2, focus on the gradation quantifier signals the presence of such a salient property. For example, consider the exclamative in (42).

(42) *J'ai   vu   un film ASSEZ   bon!*
I-have seen a   film ENOUGH good
"I saw SUCH a good movie!"

Pitch accent on the quantifier, requires that the film's "goodness" be salient in the discourse.

(43) λd_1. *I saw a d_1 good movie*

Thus, the first condition for expressive correctness given by (41) is met.

Secondly, the exclamative operator must apply to a degree property. It then, itself, introduces an objectively high threshold degree and asserts that the values for which the property is true are greater than this threshold. The semantic content of (42), which can be represented as the function in (43), is not directly a degree property. However, it is, as discussed in Section 4.1., an open proposition: a proposition with a free degree variable, *d'*.

(44) $\lambda w.\ \max(\{d:$ I saw a d good movie$\}) \geq \alpha(d')$ in w

In assertions, the truth of (44) is given by looking at the value that α assigns to *d'*. Thus, the entire expression is equivalent to the degree property in (45).

(45) $\lambda d' \lambda w.\ \max(\{d:$ I saw a d good movie$\}) \geq d'$ in w

I propose that, in a gradation exclamative, DEGREE E-FORCE applies to the property in (45); in other words, it binds the free threshold variable. Therefore, in my proposal, the expressive correctness conditions for (42) are given in (46).

(46)   *J'ai vu un film ASSEZ bon!* is expressively correct in context C iff λd_1.
       I saw a d_1 good movie is salient in C and $\exists d_2, d_2 > s$ [I am surprised that
       max({d: I saw a film d good}) > d_2]

In other words, *J'ai vu un film ASSEZ bon!* is predicted to be expressively correct just in case I am surprised that the film's "goodness" is extremely high.

4.1   Consequences

This proposal has a number of consequences, in particular with respect to the properties discussed in Section 3.3.

Firstly, it explains the semantic neutralization facts: In their canonical use in assertions, gradation quantifiers differ in the size of the threshold that the content of the main clause is being compared to. Since, with every quantifier, the exclamative operator binds the threshold and asserts that it is surprisingly high, sentences with *assez, tellement, trop, pas mal* etc. are all predicted to be expressively correct in the same situations.

Secondly, it explains the syntactic neutralization facts: Since the exclamative operator binds the threshold value, it is impossible to add a subordinate clause that would overtly specify it. This analysis also predicts that, when a *for*-clause is present, the only type of exclamation that is possible is propositional:

(47)   *J'ai bu trop de café pour m'endormir!*
       "I drank too much coffee to get to sleep!"

Unlike an exclamative, (47) is not required to have an "extreme degree" reading: it is felicitous even if drinking only 2 cups of coffee is sufficient to inhibit the speaker's sleeping, and the fact that she drank this amount is surprising.

In summary, I proposed that, in gradation exclamatives, the exclamative DEGREE E-FORCE operator binds the free variable inside a gradation construction with an implicit threshold clause. I proposed that this is possible because focus on the gradation quantifier sets up the proper discourse context for the illocutionary force operator to apply.

5.   Conclusion

In conlusion, I have presented data and a semantic analysis of a previously undiscussed class of exclamative sentences: gradation exclamatives. I proposed that the semantic content of a gradation exclamative is a gradation construction with an implicit threshold clause and focus on the quantifier. I proposed that DEGREE E-FORCE, argued for in Rett (2009), binds the threshold yielding an extreme degree reading, and that the presence of this operator is licensed by the focus structure of the sentence.

I argued that these utterances constitute a robust class of exclamatives within the Romance languages, particularly in Québec French and Italian. I showed that, despite their lack of *wh*-morphology, gradation exclamations display many of the same semantic properties observed with *wh*-exclamatives. This result is significant because it shows that the semantic properties that characterize wh-exclamatives are not uniquely due to the presence of *wh*-morphology in these utterances. This paper thus supports the work of Zanuttini & Portner (2003) and Rett (2009) that define the exclamative clause type on the basis of semantic, rather than syntactic or morphological properties.

References

Büring, D. 2008. "What's New (and What's Given) in the Theory of Focus." in the *Proceedings of the 2008 meeting of the Berkely Linguistics Society.*

Gérard, J. 1980. *L' exclamation en français*. Niemeyer, Tübingen.

Harquard, V. 2006."Aspects of *too* and *enough* Constructions." *Proceedings of Semantics and Linguistic Theory 15,* ed. by E. Georgala & J. Howell. Ithaca, NY: CLC Publications.

Heim, I. 2000. "Degree Operators and Scope." *Proceedings of Semantics and Linguistic Theory 10*, ed. by B. Jackson & T. Matthews. Ithaca, NY: CLC Publications.

Kaplan, D. 1999. "The Meaning of "ouch" and "oups"". Ms. University of California, Los Angeles.

Meier, C. 2003. "The Meaning of *too*, *enough*, and *so that*". *Natural Language Semantics,* 11: 69–107.

Michaelis, L. & K. Lambrecht, 1996. "The Exclamative Sentence Type in English," *Conceptual Structure, Discourse and Language,* ed. by A. Goldberg. 375–389. CSLI.

Milner, J-C. 1978. *De la syntaxe à l'interprétation: Quantités, insultes, exclamations.* Paris: Éditions de Seuil.

Obenauer, H-G. 1994. *Aspects de la syntaxe A-barre: Effets d'intervention et mouvements desquantifieurs.* Thèse d'État. Université de Paris VIII.

Rett, J. 2009. "A Degree Account of Exclamatives". *Proceedings of Semantics and Linguistic Theory 18*. Ithaca, NY: CLC Publications.

Rullman, H. 1995. *Maximality in the Semantics of Wh-constructions.* Ph.D. Dissertation, University of Massachusetts, Amherst.

Schawarzchild, R. 1999. "GIVENness, AvoidF, and other Constraints on the Placement of Accent." *Natural Language Semantics,* 7: 141–177.

Searle, J. 1969. *Speech Acts*. Cambridge: Cambridge University Press.

Selkirk, E. 1996. "Sentence Prosody: Intonation, Stress and Phrasing," *The Handbook of Phonological Theory*, ed. By J. Goldsmith. Basil Blackwell: London.

Von Stechow, A. 1984. "Comparing Semantic Theories of Comparison." *Journal of Semantics.* 3: 1–77.

Zanuttini, R. & Portner, P. 2003. "Exclamative Clauses: at the Syntax-Semantics Interface." *Language.* 79: 39–81.