Abstract

My objective in this paper is to integrate scalar exclamatives into an HPSG grammar of French. First, a procedure to sort out scalar exclamatives from declaratives and interrogatives is proposed. Then, the main semantic and dialogical properties of exclamatives are presented: veridicity, ego-evidentiality, illocutionary double life and scalarity. Finally, assuming Ginzburg & Sag 2000, the exclamative clause type is defined.

1 Introduction[†]

Both the notions of clause type (CT) and that of exclamative clause type (ECT) are controversial. The former has been challenged on the grounds that CTs cannot be identified by a single syntactic pattern nor by a one-to-one matching with discourse acts (a. o. Gazdar 1981). The latter was dismissed for French on the grounds that there are no lexical items or syntactic forms specific to a putative exclamative CT (a. o. Milner 1978). This paper clearly goes against such a trend in positing an Exclamative Clause Type in the Grammar of French. First, I propose a procedure to recognize exclamatives from other types of clause. Then, I present the properties that set apart exclamatives from declaratives and interrogatives. Finally, the analysis is couched in an HPSG framework using Ginzburg & Sag's 2000 constructional approach to CTs.

2. Clause types

There are two main motivations to revive clause types. The first pertains to clausal complement selection. Verbs select clausal complements on the basis of their CT (a. o. Grimshaw 1979, Ginzburg & Sag 2000); for instance, they are sensitive to the divide declarative / interrogative. There are verbs selecting declaratives and no interrogatives, verbs that select interrogatives and no declaratives –even though open interrogatives and closed interrogatives have no syntactic feature in common– and verbs selecting open interrogatives and no closed interrogatives, etc. (Huddleston 1993). The second motivation is based on a re-appraisal of the illocutionary argument. Admittedly, CTs do not determine discourse acts (polyfunctionality of CTs), nevertheless the dialogue potential of clauses is constrained by their CTs. For

instance, Beyssade et Marandin 2006 argue that CTs determine one aspect of the dialogue act: the speaker's commitment. For both of these reasons, we may posit an ECT.

3 Procedure to recognize exclamatives

Crucially, clauses featuring a member of a closed list of words interpreted as high degree quantifiers (exclamative words (EWs) henceforth), differ systematically from declaratives or interrogatives with respect to four criteria. This gives us an explicit procedure to recognize the members of the ECT.

Exclamative words are categorially diverse: adverbs (*wh* or not), adjectives, determiners and complementizers.[1] They are given in Table 1.

Wh-adverb	*combien, que (de N),*	{Combien | que de rêves fous} tu fais ! *How many foolish dreams you have!*
Complementizer	*comme, que, ce que, qu'est-ce que, si*	Comme il regrette sa décision ! *How (much) he regrets his decision !* S'il est beau, ce type ! *How beautiful he is, this guy !*
Adverb	*si, tant, tellement*	Il est si beau ! *He is so beautiful !*
Adjective	*tel*	Il a une telle audace ! *He has such a cheek!*
Wh-determiner	*quel*	Quel chapeau il portait ! *What a hat he had!*

Table 1. Exclamative words in French.

3.1 Criteria

– C1. Complement selection: selection of clauses with exclamative words (CEWs) is different from that of declaratives or interrogatives. Note that *admettre* in (1) is factive: (1b) is ungrammatical although factivity is reputed the crucial factor for exclamative selection (since Elliott 1974).

(1)   a. Paul a admis que Sue travaille beaucoup.
            Paul admitted that Sue works a lot

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[1] Gerard 1980 is the forerunner of the analysis of *comme, que, ce que, qu'est-ce que si* as complementizers. Due to space limitations, I leave aside verbless exclamatives and exclamative fragments (Laurens 2006), and the arguments supporting the categorical analysis of EWs.

b. * Paul a admis {comme | ce que} Sue travaille
Paul admitted how much Sue works

(2)　a. Paul ne se demande plus comment Sue est venue.
Paul no longer wonders how Sue came
b. * Paul ne se demande plus {comme | ce que} Sue a souffert
Paul no longer wonders how much Sue suffered

– C2. Illocutionary potential: root CEWs do not play the role of prototypical root declaratives or interrogatives (a. o. Zanuttini & Portner 2003). They cannot play the prototypical role of declaratives, viz. answers or replies to questions.

(3)　A.:　{Comment va Paul? | Paul est-il beau?}
{How is Paul ? | Is Paul beautiful ?}
B.:　#{Comme il est beau! | Il est tellement beau!}
{How beautiful he is ! | He is so beautiful !}

CEWs cannot be followed by a fragment which specifies their content (fragments following interrogatives contribute possible answers).

(4)　a. Comment est-elle venue? En train?
How did she come? By train?
b. # Comme elle est grande! Deux mètres quarante!
How tall she is ! 2,40 meters !

– C3. Behavior of complement clause under negated matrix verbs: complement CEW's content is preserved under negation of the embedding verb. Both (5a) and (5b) implicate 'Il a beaucoup souffert hier' (*He suffered a lot yesterday*).

(5)　a. Paul m'a écrit {combien | comme | ce qu} il avait souffert hier.
b. Paul ne m'a pas écrit {combien| comme | ce qu} il avait souffert hier.
Paul {wrote | did not write} to me how much he suffered yesterday

– C4. Compatibility with an overt perspective marker: CEWs are incompatible with overt perspective marker.

(6)　a. *{Selon moi | d'après Marie}, qu'il est beau !
{According to me | in Mary's opinion}, how beautiful he is
b. * Il$_j$ m'a écrit que, {d'après lui$_j$ | d'après Marie}, il est tellement beau

c. * Je lui ai rappelé ce que {d'après moi | d'après Marie}, il est beau
I reminded him how beautiful {according to me | to Mary} he is

– C5: the content of the clause should contribute a scale of degree, quantity or intensity, either lexically (via a gradable expression) or via accommodation. (8b) does not feature any scalar expression, but it describes a situation of multiple death events and thus it can be interpreted as 'how many persons are dying in this town'.

(7)   a. * Comme ce produit est périmé !
How this product is past its date of use
       b. Comme ce produit est vieux !
How old this product is

(8)   a. *{Comme | ce que) Jean meurt dans cette ville !
How Jean dies in this city
       b. {Comme | qu'est-ce qu') on meurt dans cette ville !
How one dies in this city

Criteria C1 and C2 are directly relevant to posit a clause type. C2 and C3 – not discussed in previous literature to my knowledge– are crucial to characterize its semantics. C5 does not apply to CEWs with *quel* (and a number of verbless CEWs).[2]

3.2 Exclamative vs exclamation

There are clauses, which are commonly reputed exclamatives or exclamations, that do not meet the criteria above. I single out two cases. The former is made of clauses with intensive NPs or PPs such as those in (9):

(9)   a. Paul a acheté un de ces cheval!
Paul bought one of these.PL horse.SG
'Paul bought such a horse!'
       b. Paul est {d'un intelligent | d'une intelligence}!
Paul is {of.PREP an intelligent.N/A | of an intelligence}
'Paul is incredibly intelligent!'

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[2] Degree expressions are either based on the comparison between arbitrary objects or on the comparison with a fixed standard (Benveniste 1948, Kennedy *to app.*). For example, the interpretation of *Quel chapeau (elle portait ce soir-là) !* (*What a hat (she had that night)!*) involves the ideal (or the anti-ideal) hat (in the speaker's view) (Lakoff 1987): 'she wore a hat having the features that make up the best/worse hat (best/worse in the speaker's view)'. In this paper, I only consider clauses with a scalar interpretation.

Clauses with intensive NPs or PPs behave like regular declaratives: they are selected by the same verbs, felicitous in answers, very hard to process in negative embeddings (like other intensive expressions), compatible with perspective markers and with non scalar content.

Criteria	Examples
C1	Paul a admis qu'elle avait été d'un calme pendant l'interview ! *Paul admitted that she had been quite calm during the interview.*
C2	A.: Comment allait Paul ? *How was Paul?* B.: Il avait une de ces forme ce matin ! *He was on such a form this morning!*
C3	* Paul ne m'a pas dit que Marie était d'un déprimé depuis quelques jours *Paul did not tell me that Marie was incredibly depressed since days.*
C4	Selon Paul, il avait une de ces forme ce matin !
C5	Il a un de ces chapeau ! C'est d'un périmé, ton truc ! *He has an incredible hat! That's well beyond its date of use!*

Table 2. Clauses with intensive XPs behave like regular declaratives

Rhetorical Questions (RQs) are the second case in point. RQs are interrogatives conveying a biased question whose answer is Common Ground and whose dialogue impact requires the activation of such a content. They do not have any specific selection properties, they are felicitous as replies and compatible with a fragment expressing the bias, felicitous with perspective markers and completely indifferent to the scalar / non scalar divide.

Criteria	Examples
C1	Je me demande si le pape est catholique? *I wonder whether the pope is Catholic.*
C2	A.: Marie a-t-elle accepté le poste? *Has Mary accepted the position ?* B.: Marie sait-elle refuser une offre qui flatte son ego ? *Does Marie knows how to refuse something flattering for her ego?* ----- A.: Le pape est-il catholique? {Non ?	Oui ?} *Is the pope Catholic? {No?	Yes?}* B.: <..> A.: *Alors, arrête de me dire* [..] B.: < ..> A.: *Then stop saying* [..]
C4	Selon toi, Marie sait-elle refuser une offer qui flatte son ego ? *According to you, does Marie know how to refuse something flattering?*
C5	Mange-t-on des produits périmés pour le plaisir ? *Does one eat products past their date of use on purpose?*

Table 3. Intensive rhetorical questions behave like regular interrogatives

Since CEWs are the only clauses to show systematic differences with declaratives or interrogatives, I take it that that they are the only ones that should be analyzed as realizing a type of clause. CEWs are exclamatives and positing an ECT should enable one to capture their common properties.

4 Properties of the exclamative clause type

The criteria proposed above reveal the characteristic properties of the exclamative clause type.

4.1 Veridicity

As shown in (5) above, the content of complement exclamatives is preserved under negation of embedding verbs. More generally, exclamative content is preserved in the scope of a modal operator, the antecedent of a conditional and in questions. All utterances in (10) implicate 'Paul was very unhappy at school'.

(10)   a.   Il est possible que Paul dise {comme il a été malheureux | ce qu'il a pu être malheureux} à l'école.
          It is possible that Paul says how unhappy he was at school
       b.   Si Paul te dit {comme il a été malheureux | ce qu'il a pu être malheureux} à l'école, alors tout ira bien.
          If Paul tells you how unhappy he was at school, then all will be alright
       c.   A-t-il dit {comme | combien | ce qu} il avait été malheureux à l'école ?
          Did he say how unhappy he was at school

Hence, exclamative content (EC) belongs to the veridical content of utterances, along with presuppositions (pps) and conventional implicatures (CIs). Veridical content is the content the speaker is committed to even though it is not asserted (Karttunen & Zaenen 2005). Then, the natural question is whether EC is akin to pps or to CIs, or something else. Tests based on other properties of veridical content, i. e. suspension and cancellation, are of little help in that matter (Jayez sd).[3] Nevertheless, an overlooked property provides us with an important cue.

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[3] Root exclamatives pass the usual test of suspension, but not complement exclamatives.
(i) a.   S'il se trompe, qu'est-ce qu'il se trompe !
      If he is mistaken , how much mistaken he is
    b.   ?? S'il se trompe, je {t'écrirai | ne t'écrirai pas} {comme | ce qu'} il se trompe.
      If he is mistaken, {I will | will not} write you how very mistaken he is
This is the usual situation with those tests whose results vary due to interferences with other aspects of the expressions triggering pps or CIs.

Cancellation of pps or CIs via negation in monologues yield natural segments of discourse, if it is correlated with an explicit perspective shift. The more explicit the shift is, the more natural the discourse is.

(11)   a.   Paul {est | n'est pas} allé chercher ses enfants à l'école. Selon la police, il n'a pas d'enfants.
Paul {went | did not go} and take his kids from school. According to the police, he has no kids.
       b.   Lance, le plus grand coureur de tous les temps, a gagné le tour. Selon moi, ce n'est pas le plus grand coureur et il a triché.
Lance, the greatest cyclist of all times, won. To me, he is not the greatest cyclist and he cheated.

ECs behave in the same way. Notice that the EC must be presented as the opinion of an agent who is a potential speaker. In (12), 'Pierre is very good' reflects Marie's opinion in the exclamative, it is then negated from the perspective of the speaker.

(12)   Marie admire beaucoup Vergez. Elle m'a encore répété hier {combien | ce qu'} il avait été bon dans le procès Dupond. Pourtant, je sais qu'il n'a pas été bon dans cette affaire.
Marie admires Vergez a lot. She told me again how good he was in Dupond's affair. Yet, I know that he was not good in that case

This gives us the right perspective to analyze the incompatibility of exclamatives with explicit perspective markers (see (6) above). Such an incompatibility sets apart exclamative: inducers of pps or CIs are fien with perspective markers (13).

(13)   a.   Selon Paul, Sue ne fumait pas. Selon Pierre, elle a cessé de fumer.
According to Paul, Sue did not smoke. According to Pierre, she stopped smoking
       b.   Malheureusement pour Paul, Marie est revenue. Heureusement pour moi, elle est partie.
Unfortunately for Paul, Marie came back. Fortunately for me, she went away
       c.   # Selon Paul, les élèves ne sont pas bons. Selon Pierre, {comme ils sont forts | ils sont tellement forts !}.
According to Paul, the students are not good. According to Pierre, how good they are.

Exclamatives share such a trait with declaratives reporting inner state or experience.

(14) a. # A mon avis, je suis désolé.
          To my opinion, I am sorry
      b. # A ton avis, je suis désolé.
          To your opinion, I am sorry

There is a difference though: (14b) may be salvaged as a questioning declarative, which is not an option available for exclamatives. This observation opens the way to capturing the specificity of EC.

4.2 Ego-evidentiality

Evidentiality is the grammaticalized marking of the source of content. Thus, direct or perceptual source, hearsay or inference are among the most often marked types of source in the languages of the world (Aikhenvald 2006). Garrett 2001 introduces the category of ego-evidentiality in his analysis of the intricate evidential system of Tibetan: in ego-evidentiality, the source of the content is the speaker's immediate and direct knowledge. In (14), both the content and the source of evidence are Ego; in exclamatives, only the source is Ego (the content may pertain to any state of affair).[4] I take it that the incompatibility with perspective markers results from redundancy or a conflict in the marking of the source of evidence.

This proposal enables one to account for the selection of exclamatives – remember that it cuts across the factive / nonfactive divide. Exclamative selectors present the speaker as having a direct access to the complement content and such direct access as being the warrant for her certainty. Hence, the fact that exclamatives are selected by verbs describing an experience of the content, be it perceptual or mental; verbs whose meaning involves hearsay (15b), inference (15c), an interactive process (15d) or a mental posture towards content other than intuition (15e) are no felicitous exclamative selectors.

(15) a. Il a entendu comme elle chantait bien.
          He heard how well she sang
      b. * Il a entendu dire comme elle chantait bien
          He heard it said how well she sang
      c. * Il en a{conclu | déduit} comme elle chantait bien
          He concluded how well she sang
      d. * Il a convaincu Paul comme elle chantait bien
          He convinced Paul how well she sang

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[4] EC is displaceable contrary to the meaning of supplemental expressions (Potts 2007b).

e. * Il croit comme elle chante bien
    He believes how well she sang

The contrast in (16) illustrates the selection principle in a nutshell. The contrast involves the homonyous verbs *trouver* (Ducrot 1980). One of the condition on the felicitous use of the performative verb *trouver*$_1$ is that the content of the complement " is based on the experience (direct or indirect) of what is evaluated" (ibid: 84), while *trouver*$_2$ indicates that the content of the complement has been reached "after a research or the discovery of relevant pieces of evidence" (ibid: 60). As expected, exclamatives are only felicitous with *trouver*$_1$. [5]

(16) a. Je trouve qu'il a tellement tort dans cette affaire.
          I think that he is so wrong in this affair
      b. * Depuis ses dernières déclarations, il trouve qu'il a tellement tort dans cette affaire.
          Since his last declarations, he discovered that he is so wrong in this affair

Ego-evidentiality and mirativity are different (Delancey 2001). Thus, the claim that exclamative content is ego-evidentially marked is sharply different from the view widely shared in the literature that exclamative content is mirative(-like): «Exclamation conveys surprise […] that entails a judgment by the speaker that a given situation is noncanonical » (Michalelis, 2001: 1039). The mirative conception is hard to reconcile with the actual gamut of uses of root exclamatives. For example, Zanuttini & Portner aptly note that "polite compliments like *what a delicious dinner he made !* don't imply that the quality of the dinner is surprising, amazing, or anything of the sort (he might always cook well)". It is even harder to reconcile with the actual use of complement exclamatives. For example, (17) is perfectly natural even though the exclamative content refers to a past situation and cannot involve any reaction of surprise.

(17) S'il realise un jour {comme | ce qu'} il a été heureux avec elle, il changera peut-être.
      If he ever realizes how happy he was with her, then he will perhaps change

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[5] By the way, *trouver*$_1$ only select exclamatives with adverbial exclamatives: * *Je trouve {comme | combien} elle est belle*. *Trouver*$_2$ is resolutive: it selects open interrogatives but not exclamatives, which is another example of the fact that interrogative selection and exclamative selection are distinct.

The evidential approach captures the expressive flavor of exclamatives without arbitrarily assuming that they have to express an emotive attitude, and in particular, surprise. Exclamatives in context can be associated with the expression of an emotion, just like any utterances of other types. Maybe it is the case with root exclamatives more often than not, but nothing supports the claim that exclamatives fare differently from intensive declaratives or intensive rhetorical questions.

4.3 Double illocutionary life

Root exclamatives do not have the same dialogue potential as declaratives or interrogatives. Another feature can be added that sets them apart from declaratives: they resist dialogue refutation (18B.a). Surely, the addressee may express his disagreement as in (18B.b). But, even in this case, A's exclamation goes through because it does not need to be taken up by the addressee.

(18)   A.:   Comme il est bête !
              How silly he is
       B.:   a. #{Non ! | C'est faux !}
                 {No | That' not true}
             b. {Je ne trouve pas | je ne suis pas d'accord}
                 {I do not agree | You're kidding}

A striking feature of root exclamatives is their monofunctionality: they always give rise to exclamations. By exclaiming, the speaker presents herself as being committed to the content of her utterance. Contrary to what is going on in asserting, she does not call on her addressee to make it shared or common ground.   As Milner 1978 puts it, she merely asks the addressee to be the witness of her opinion. Now, such a characterization is only true of root exclamatives. As for complement exclamatives, they contribute to the content of the matrix assertions or questions. In other words, they contribute content that is asserted or questioned.   This is shown by the behaviour of exclamatives with Discourse relations (DRs). DRs hold between asserted contents. DRs cannot relate two root exclamatives or an exclamative and a declarative, while they can relate two complement exclamatives. Take the CAUSE relation, holding between two declaratives in (19) where it is cued by *en effet* and *car*.

(19)   a.   Paul a travaillé dur. En effet, il devait beaucoup d'argent à ses
            parents.
            Paul worked hard. Indeed he owed a lot of money to his parents

    b. Marie lui a écrit que Paul avait beaucoup travaillé car il devait
       beaucoup d'argent à ses parents.
       Marie wrote him that Paul worked hard because he owed a lot of
       money to his parents

The discourse in (20) featuring two complement exclamatives is well-formed; (21) involving a root exclamative and a declarative is not.

(20)   a. Marie lui a écrit comme Pierre avait travaillé dur car il devait
         beaucoup d'argent à ses parents.
      b. Marie lui a écrit comme Pierre avait travaillé dur. En effet, il devait
         beaucoup d'argent à ses parents.

(21)   a. # Paul a travaillé si dur. En effet, il devait beaucoup d'argent à ses
         parents.
      b. # Comme Paul a travaillé dur ! En effet, il devait beaucoup d'argent
         à ses parents.

4.4 Scalarity

It is not enough to say that exclamatives require a scalar content. Exclamative words behave like any other degree word: they are sensitive to the structure of the scale introduced in the context (Kennedy & McNally 2005b). It should be open or lower closed. Here, I restrict myself to scales of degrees associated with adjectives. Adjectives with a totally open scale yield felicitous exclamatives (22a), while adjectives with a totally closed scale do not (22b).[6]

(22)   a. Comme le livre de Marie est intéressant!
         How interesting Mary's book is
      b. *{Ce que le verre de Marie est plein ! | Le verre de Marie est
         tellement plein !}
         How full Marie's glass is

Adjectives with a lower closed scale yield felicitous exclamatives (23a), while adjectives with an upper closed scale do not (23b).

(23)   a. Comme ta demande est injustifiée !
         How unjustified your demand is
      b. ?? Comme ta demande est justifiée
         How justified your demand is

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[6] When used imprecisely (Kennedy & McNally 2005b: 357), *plein* is felicitous in exclamatives: Comme la salle est pleine ce soir ! (How full the theater is to-night!).

It is often claimed that exclamatives involve a quantification along a dimension of unusualness (noncanonicity in Michaelis 2001). This would be the main difference with non-exclamative high degree words like *très* (very) ou *tout à fait* (quite). The claim is too strong: in most uses, there is not the slightest implication that the state of affair described in the exclamative deviates from the ordinary course of things. Moreover, it is incomplete: if something was unusual, it would be the high degree. Thus, high degree is the core of the content of exclamative quantification. It is common to distinguish between the high degree associated with *very* and that associated with *much* (Kennedy & McNally 2005b). *Very* involves a restriction of the comparison class: a very beautiful boy is a beautiful boy among the beautiful boys. On the other hand, *much* involves a degree "greater by a large amount than" the standard used for the quantification: a much desired change is a change desired to a degree d such that d is far above the standard of desirability. I have no decisive argument (besides intuition) to support the stance I adopt here that exclamative words side more with *much* than with *very*. If this proves wrong, it will not change the core of the analysis anyway

4.5 To sum up

Clauses that meet the five criteria presented above behave differently from declaratives and interrogatives. Their main characteristics pertains to the relation they bring about between their content and the speaker: the speaker (more rarely, the reported speaker) is the source of the content and she is committed to its truth.

5 An HPSG grammar of scalar exclamatives in French

Ginzburg & Sag 2000 (G&S henceforth) give a constructional definition of CTs in which the semantic type of the content represents the identifying feature of each CT: the content of declaratives is a proposition, the content of interrogatives a propositional abstract. Accordingly, constituency diversity is no longer an obstacle to positing CTs but a ground to recognize subtypes (which are necessary to establish the fine-grained selection of complements by verbs). From that perspective, G&S propose that (a) the content of exclamatives is a fact (rather than a proposition) and (b) exclamative words contribute an existential quantification on degrees and a restriction: the degree is "unusual". Proposal (a) is based on the assumption that verbs selecting exclamatives should be factive in English, which does not carry over to French. Proposal (b) is rooted in the mirative analysis of exclamatives, which I have shown to be inadequate above. I take up the overall framework, but reformulate the analysis of exclamatives on the basis of the descriptive generalizations I arrived at in the preceding sections: (a') the content is a proposition with ego-evidential status and (b') exclamative

words contribute an existential quantification and a restriction: the degree is much raised.

5.1 Framework

In G&S's constructional approach, clause types inherit both a CLAUSALITY type and a HEADEDNESS type. HEADEDNESS constrains the constituency, CLAUSALITY primarily constrains the content.
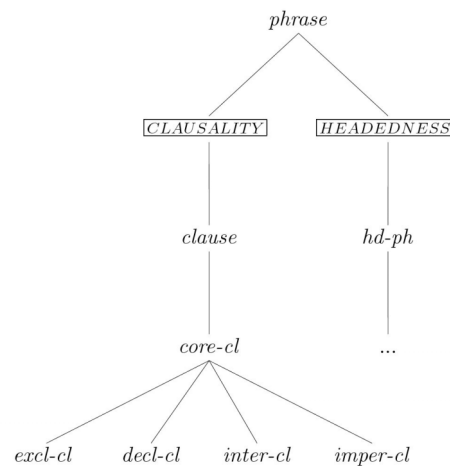

Fig. 1. Hierarchy of phrases

Words are hybrid entities contributing to both dimensions. Exclamative words will play a central role in the analysis I propose, which reflects the fact that there would be no ECT if there were no exclamative words. Finally, G&S posit special constructions (*hd-only-ph*) to cater for the illocutionary dimension of root clauses. Here I will slightly depart from the original framework by adopting proposals made by Bonami & Godard 2007, 2008 and Beyssade & Marandin 2006.

5.2 Exclamative words

Exclamative words (EWs) cannot be reduced to word use; they are not merely *wh*-expressions or degree words which gain exclamative meaning by virtue of being used with expressive or intensive content ("non-classifying judgment in Milner 1978). They have specific properties as shown above.[7] In

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[7] Note that there are only three (out of twelve) items homonymous (i. e. having same form and same part of speech) with items occurring in another CT (with a different

order to set up the explicit compositional semantics of the ECT, I claim that they make two contributions: a quantifier and an evidential marker.

5.2.1 Quantification

EWs contribute a degree / quantity / intensity quantification (depending on the scale introduced in the content). Here, for ease of presentation, I restrict myself to degree quantification associated with adjectives. I stick to Kennedy &McNally's 2005b analysis of adjectives and degree words.

Adjectives denote relations between individuals and degrees.

(24) *gradable word* $\Rightarrow$

$$\begin{bmatrix} \text{CONT} & \begin{bmatrix} gradable\text{-}rel \\ \text{ARG1} \; ind \\ \text{SCAL-ARG} \; d \end{bmatrix} \\ \text{STORE} & \left\{ \begin{bmatrix} param \\ \text{SCAL-ARG} \; d \end{bmatrix} \right\} \end{bmatrix}$$

Exclamative words are degree words that bind the degree contributed by gradable expressions. Like other degree words, they impose a restriction on the adjective's degree argument. I claim that it is the same restriction as that contributed by *much*: "the degree is far above the standard" (noted ">>") used for the property denoted by the adjective. In order to keep things simple, I assume that the standard is a constant fixed in the context.

(25) *high-deg-rel* $\Rightarrow$ [d >> standard]

(26) *exclamative word* $\Rightarrow$

$$\begin{bmatrix} \text{CONT} & \left\{ \begin{bmatrix} high\text{-}deg\text{-}rel \\ \text{SCAL-ARG} \; d \end{bmatrix} \right\} \\ \text{BKG} & \left\{ \begin{bmatrix} \text{STANDARD} = a \end{bmatrix} \right\} \end{bmatrix}$$

In *comme Paul est grand!* ou *Paul est si grand!*, the degree content is paraphrasable as 'There is a degree d to which Paul is tall and such that d is far above the standard degree used to qualify a human like Paul as tall'.

5.2.2 Evidential operator

The second contribution is to mark the content of the clause in which it occurs as ego-evidential. I introduce an evidential operator with two arguments: the source of the evidence and the content for which the evidence holds. This enables one to capture two features specific to this kind of

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meaning): quantitative *combien* (*combien d'erreurs!*), *quel* and complementizer *si* (*s'il est beau, ce type!*).

evidential marking (McCready 2008): it may concern only part of a clause and the content it marks escape semantic embedding. As for ego-evidentiality, the source is the speaker (unless shifted, which I leave aside here) and the content the proposition in which the EW occurs.

(27) Ego-evidential operator ⇒

$$\begin{bmatrix} ego\text{-}evidence \\ \text{SOURCE} \;\boxed{3} \\ \text{CONT} \; proposition \\ \text{CXT} \begin{bmatrix} \text{C-IND} \mid \text{SPEAKER} \;\boxed{3} \end{bmatrix} \end{bmatrix}$$

5.2.3 Exclamative words

Exclamative words have the same quantifying content whatever their part of speech. The quantifier is put into store, so that it is available at the clausal level for retrieval (complementizer EWs force the retrieval themselves). Moreover, I resort to the contextual feature COMMITMENT (CMT) introduced by Bonami & Godard 2008 to analyze evaluative adverbs. CMT inheritance works as other contextual features: the CMT of a clause is the union of the CMT of its daughters. It feeds the SPEAKER-ONLY-CMT slot in the DGB at the utterance level where its dialogical impact is effective.

Below are three entries for prototypical EWs. *Tellement* is an adverb modifying a gradable adjective locally (*Il m'a tellement semblé être beau*). *Comme* is a complementizer and associates either with the main relation (*Comme il est beau* !) or a gradable relation within a daughter (*Comme ils habitaient dans de belles maisons !* lit. : how they lived in beautiful houses).

$$\begin{bmatrix} tellement \\ \text{CAT} \begin{bmatrix} adverb \\ \text{MOD} \begin{bmatrix} \text{CONT} \; gradable\text{-}rel \end{bmatrix} \end{bmatrix} \\ \text{CONT} \left\langle \boxed{1} \begin{bmatrix} high\text{-}deg\text{-}rel \\ \text{SCAL-ARG} \; d \end{bmatrix} \right\rangle \\ \text{STORE} \left\{ \boxed{1} \right\} \\ \text{CXT} \begin{bmatrix} \text{C-IND} \mid \text{SP} \;\boxed{6} \\ \text{BKG} \begin{bmatrix} \text{STANDARD} \boxed{3} = a \end{bmatrix} \\ \text{CMT} \left\{ \boxed{5} \begin{bmatrix} ego\text{-}evidence \\ \text{SOURCE} \;\boxed{6} \\ \text{CONT} \begin{bmatrix} prop \\ \text{QUANTS} \; \boxed{1} \oplus A \end{bmatrix} \end{bmatrix} \right\} \end{bmatrix} \end{bmatrix}$$

Fig.2: Adverbial *tellement*

$$\begin{bmatrix} comme \\ \text{CAT} \mid \text{HEAD} \; c \\ \text{COMPS} \left\langle \begin{bmatrix} \text{STORE} \left\{ \boxed{2} \begin{bmatrix} param \\ \text{SCAL-ARG} \; d \end{bmatrix} \right\} \cup \boxed{A} \\ \text{CONT} \;\boxed{3} \end{bmatrix} \right\rangle \\ \text{CONT} \begin{bmatrix} \text{QUANTS} \left\langle \boxed{1} \begin{bmatrix} high\text{-}deg\text{-}rel \\ \text{SCAL-ARG} \; d \end{bmatrix}, \boxed{2} \right\rangle \oplus \boxed{B} \\ \text{NUCL} \;\boxed{3} \end{bmatrix} \\ \text{CXT} \begin{bmatrix} \text{C-IND} \mid \text{SP} \;\boxed{6} \\ \text{BKG} \left\{ \begin{bmatrix} \text{STANDARD} \boxed{3} = a \end{bmatrix} \right\} \\ \text{CMT} \left\{ \boxed{5} \begin{bmatrix} ego\text{-}evidence \\ \text{SOURCE} \;\boxed{6} \\ \text{CONT} \begin{bmatrix} prop \\ \text{QUANTS} \; \boxed{1} \oplus A \end{bmatrix} \end{bmatrix} \right\} \end{bmatrix} \end{bmatrix}$$

Fig.3: Complementizer *comme*

I follow Abeillé & Godard 2007 for adverbal *combien*. Syntactically, it is a filler corresponding to a gap complement of the verb. Semantically, it behaves like *comme* (in a different register, which I leave aside here).

$$
\begin{bmatrix}
combien \\
\text{CAT}
\begin{bmatrix}
adverb \\
\text{MOD}\ \text{V}
\begin{bmatrix}
\text{STORE}
\left\{
\begin{bmatrix}
param \\
\text{SCAL-ARG}\ d
\end{bmatrix}
\right\} \cup \boxed{A}
\end{bmatrix}
\end{bmatrix} \\
\text{CONT}\ \left\langle \boxed{1}
\begin{bmatrix}
high\text{-}deg\text{-}rel \\
\text{SCAL-ARG}\ d
\end{bmatrix}
\right\rangle \\
\text{STORE}\{\boxed{1}\} \\
\text{WH}\ \{\boxed{1}\} \\
\text{CXT}
\begin{bmatrix}
\text{C-IND}\mid \text{SP}\ \boxed{6} \\
\text{BKG}\ \{[\text{STANDARD}\boxed{3} = a]\} \\
\text{CMT}\ \left\{ \boxed{5}
\begin{bmatrix}
ego\text{-}evidence \\
\text{SOURCE}\ \boxed{6} \\
\text{CONT}\ prop\ [\text{QUANTS}\ \boxed{1} \oplus A]
\end{bmatrix}
\right\}
\end{bmatrix}
\end{bmatrix}
$$

Fig.4: *Wh*-adverb (adverbal) *combien*

5.3 The exclamative clause type constraint

The constraint which unifies the exclamative clause type is inherited in the CLAUSALITY dimension. It forces the retrieval of the quantifier contributed by EWs; its content is a quantified proposition. The content in CMT (the content that is evidentially marked) is passed along; its dialogical contribution depends on whether the clause is root or complement.

(28) *exclam-cl* $\Rightarrow$

$$
\begin{bmatrix}
\text{CAT}\ [\text{V-FORM}\ indicative] \\
\text{CONT}\ \left\langle \boxed{4}
\begin{bmatrix}
proposition \\
\text{QUANTS}\ \langle \boxed{1}\ high\text{-}deg\text{-}rel \rangle \bigcirc \boxed{A} \\
\text{NUCL}\ \boxed{3}
\end{bmatrix}
\right\rangle \\
\text{CMT}\ \left\{ \boxed{5}
\begin{bmatrix}
ego\text{-}evidence \\
\text{SOURCE}\ \boxed{6} \\
\text{CONT}
\begin{bmatrix}
prop \\
\text{QUANTS}\ \boxed{1} \oplus \boxed{A} \\
\text{NUCL}\ \boxed{3}
\end{bmatrix}
\end{bmatrix} \cup \boxed{B}
\right\} \\
\text{WH}\ \{\}
\end{bmatrix}
$$

Inheritance of subtypes in the dimension of HEADEDNESS accounts for the syntactic diversity of exclamatives. Below is a fragment of the hierarchy accounting for some instances of exclamative subtypes.
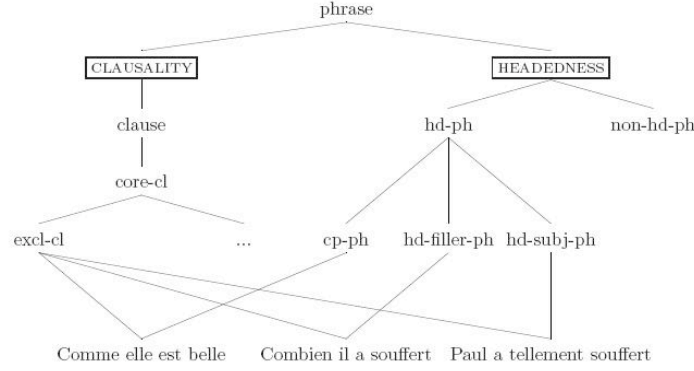
```
                           phrase
              ┌──────────────┴──────────────┐
        ┌──────────┐                  ┌──────────┐
        │CLAUSALITY│                  │HEADEDNESS│
        └──────────┘                  └──────────┘
            │                      ┌───────┴───────┐
          clause                 hd-ph          non-hd-ph
            │                 ╱    │    ╲
          core-cl           ╱      │      ╲
        ┌────┴────────┐  cp-ph  hd-filler-ph  hd-subj-ph
      excl-cl    ...
```

Comme elle est belle   Combien il a souffert   Paul a tellement souffert

Fig.5: Subtypes of ECT (fragment)

5.4 Exclamative clauses in dialogue

5.4.1 Root exclamatives

Root exclamatives give rise to exclamations. In terms of update of the Dialogue Gameboard (DGB) (Ginzburg 2008), exclamations do not contribute to the interactive construction of the shared ground, but enlarge the contents the speaker chooses to get commited to publicly. Here, I assume Beyssade & Marandin's 2006 architecture of the DGB (see Fig.6 below). Two types of Speaker's commitment are distinguished: those that the speaker intends to share with the addressee (INTERACTIVE COMMITMENT) and those that she does not (SPEAKER-ONLY COMMITMENT). Moreover, a specific slot (CALL-ON-ADDRESSEE) is introduced to model the interactive working of the dialogue independently of the question/answer pair (QUD). It captures the content the speaker wants the addressee to get committed to.

$$
\text{DGB}
\begin{bmatrix}
\text{INTERACTIVE-CMT}
\begin{bmatrix}
\text{SHARED-GROUND } list \\
\text{QUD } list \\
\text{TO-DO-LIST } list
\end{bmatrix} \\
\text{SPEAKER-ONLY-CMT } set \\
\text{CALL-ON-ADDRESSEE } list \\
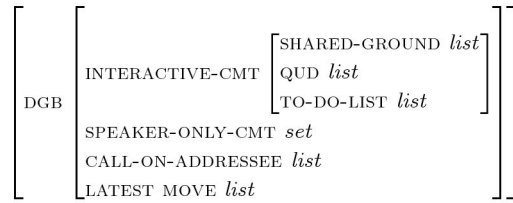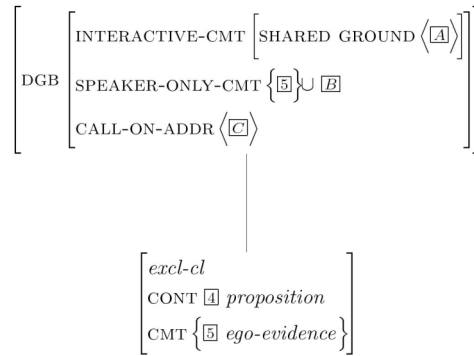\text{LATEST MOVE } list
\end{bmatrix}
$$

Fig.6. Dialogue Gameboard

Exclamation is conceived of as a dialogue move, i. e. a move that updates the DGB. It is analyzed as a *hd-only-phr* construction which directly encodes the updates in the DGB. Exclamations do not contribute new contents or any calls-on-addressee for the advancement of the current dialogue. They only contribute to the image the speaker gives of herself with respect to the topic

addressed in the exclamative. Notice that the propositional content remains available for the addressee to challenge (see (18.Bb) above). Schematically:

(29) *Exclamation* ⇒

$$\left[\text{DGB} \left[\begin{array}{l} \text{INTERACTIVE-CMT} \left[\text{SHARED GROUND} \left\langle \boxed{A} \right\rangle \right] \\ \text{SPEAKER-ONLY-CMT} \left\{ \boxed{5} \right\} \cup \boxed{B} \\ \text{CALL-ON-ADDR} \left\langle \boxed{C} \right\rangle \end{array} \right] \right]$$

$$\left[\begin{array}{l} \textit{excl-cl} \\ \text{CONT } \boxed{4} \ \textit{proposition} \\ \text{CMT} \left\{ \boxed{5} \ \textit{ego-evidence} \right\} \end{array} \right]$$

5.4.2 Complement exclamatives

Complement exclamatives contribute part of the content of the matrix assertion or question, while the evidential character of this part escapes the asserting or the questioning. It is where the 'split' of the content into CONT and CMT is put to use. The analysis of *Paul n'a pas dit comme Marie est intelligente* (Paul did not say how intelligent Marie is) is sketched in Fig. 7 below. The content of the complement exclamative feeds the asserted content: the content the speaker is ready to add to the shared ground and that she calls on the addressee to accept as being shared ground. The content of CMT feeds the commitments the speaker does not ask the addressee to share.

This analysis is parallel to the analysis of evaluative adverbs given by Bonami & Godard 2008. This is no chance. There is indeed a communality between the two phenomena: evaluative adverbs and exclamatives contribute public cues about the attitude of the speaker towards what she is saying. These cues are not "at issue": they do no fuel the interactive incrementation of the shared ground while they influence the way how dialogue participants perform such an incrementation.

6 Conclusion

The proposal rests on two claims. First, high degree is not the hallmark of French exclamatives, but rather ego-evidentiality. Ego-evidentiality is responsible for the veridicity of exclamative meaning, which is different from factivity. Secondly, exclamative content is propositional. Thus, there is no one-to-on matching between CTs and types of content as claimed in G&S. On the technical side, I resort to the feature CMT to capture the dialogical resemblance between the meaning contributed by supplemental expressions

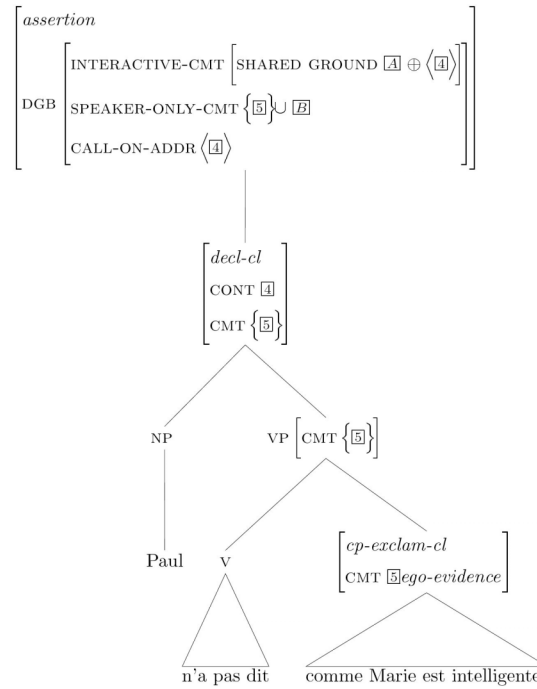(Potts 2007a/b, Bonami & Godard 2007) and the evidential meaning contributed by exclamatives.

Fig. 7: Analysis of a complement exclamative

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