

## Number agreement variation in Catalan dialects\*

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The aim of this article is to show that certain parametric properties and their interaction with UG principles allow us to differentiate between two main varieties of Catalan. We will also show that the values of the parameter studied here are active in other Romance languages. That is to say, some dialects of Catalan are similar in this respect to certain dialects of Spanish and Portuguese, whereas others may be grouped with Occitan and French.

The theoretical aim of the article is to show that the functional category Tense is the locus of the parametric variation in number agreement in certain kinds of Catalan existential sentences. We will concentrate on deontic existential sentences, because their complexity makes them a very interesting matter of study. However, the conclusions we draw here are equally valid in general terms for other existential constructions.

Section 1 is dedicated to some introductory remarks on Catalan syntax. In section 2 we introduce the relevant data for our analysis. We basically concentrate on two Catalan dialects: Central Catalan (mainly the dialect spoken in the Girona area) and Ribagorçan Catalan, a dialect spoken in the northwest of Catalonia. In Ribagorçan Catalan no agreement is shown between the existential verb and its object. However, Central Catalan shows agreement between the verb and its object in existential constructions. We will argue in section 3 that this agreement is in number, not in person. We will then characterize the universal principles which are at the root of the presence/absence of verbal concord. These are principles taken from Chomsky (1999) and they are introduced in subsection 3.1. In 3.2 and 3.3 we will determine the parameters of variation, which we place among the features of the functional category Tense (T). The Locative property of some of these features is the cause of this variation. The selection of one or the other value for number feature in T –i.e. L-number or  $\alpha$ -number– accounts for the bifurcation between Catalan dialectal grammars. Section 4 shows that the determination of the uninterpretable person and number features in T

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is not necessarily simultaneous. It is determined separately in some Romance existential constructions. Furthermore, empirical evidence is provided for Agree (and case-determination) as an independent operation of the EPP-feature satisfaction. In section 5 we will devote attention to the concord phenomenon in other Catalan constructions. The clitic climbing phenomenon in some deontic existential constructions with an infinitive clause is briefly commented on in section 6. Comparison with other Romance languages will be made in section 7. Finally, conclusions are summarized in section 8.

## 1. Some introductory remarks

Catalan is a null subject language. This means that Catalan allows null subjects with definite pronominal interpretation. It also allows subjects to occur in postverbal position, leaving the preverbal subject position empty. The various options are shown in (1).<sup>1</sup>

- (1) a. \_\_\_ parla  
       speaks  
       '(S)he speaks'  
       b. Ell parla  
       he speaks  
       'He speaks'  
       c. Parla ell  
       speaks he  
       'He speaks'

The silent subject in (1a) is characterized as a phonologically empty nominative pronoun (*pro*), whereas the strong pronoun *ell* 'he' in (1b-c) is an overt nominative pronoun. Both pronouns agree with the verb in person and number. Nevertheless, strong and null pronouns are not the only subject pronouns in Catalan. Like other Romance languages, Catalan allows constructions with an oblique clitic subject. They are existential constructions such as those in (2).

- (2) a. Hi ha una biblioteca nova  
       cl. has a library new  
       'There is a new library'  
       b. Hi cal una biblioteca nova  
       cl. is-necessary a library new

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<sup>1</sup> For other properties of Catalan as a null subject language, see Rizzi (1997), Solà-Pujols (1992), and references cited therein.

- 'A new library is needed (t)here'
- c. *Hi urgeix una biblioteca nova*  
 cl. is-urgent a library new  
 'A new library is urgently needed (t)here'

Sentences in (2) have an existential verb – the presentational verb *haver*, and the deontic existential verbs *caldre* and *urgir* <sup>2</sup>–, an object (*una biblioteca nova*) and an oblique clitic subject (*hi*). By the term 'existential verb' we mean a verb with a static preposition incorporated in it (see section 2). We do not include the copulative verb *ser* 'be', which can appear in some presentational constructions instead of *haver* 'have':

- (3) a. *No hi ha cap autobús*  
 not cl. has any bus  
 'There is no bus'
- b. *Els autobusos no hi són*  
 the buses not cl. are  
 'The buses are not here/there'

In section 2 we will argue that the locative clitic *hi* in (2) and (3a) acts as a clitic subject, whereas in (3b) it acts as a PP predicate with the copulative verb *ser* 'be'. Nevertheless, the oblique clitic *hi*, which is called an 'adverbial pronoun' by traditional grammarians, shows other roles in Catalan. For example, in (4) the clitic *hi* acts as a verbal object. It can act either as a stative locative clitic, as in (4a), or as a directional locative clitic, as in (4b). It can also stand for a PP object, as in (4c), and in some dialects it stands for an inanimate dative, as in (4d). On these and other roles of this clitic in Catalan, see Fabra (1956), Bonet (1991), and Rigau (1982).

- (4) a. *Ell viu a Banyoles / Ell hi viu*  
 he lives in Banyoles / he cl. lives  
 'He lives in Banyoles / He lives there'
- b. *Ell va a Banyoles / Ell hi va*  
 he goes to Banyoles / he cl. goes  
 'He is going to Banyoles' / 'He is going there'
- c. *Ell pensa en tu / Ell hi pensa*  
 he thinks about you / he cl. thinks

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<sup>2</sup> According to Lyons (1997: §17.4), the term *deontic* refers to the logic of obligation and permission: "Deontic modality is concerned with the necessity or possibility of acts performed by morally responsible agents".

- 'He is thinking about you'
- d. Ell dóna cops *al televisor* / Ell *hi* dóna cops  
 he gives blows to the television-set / He cl. gives blows  
 'He is hitting the television set' / He is hitting it'

The clitic *hi* is the only oblique clitic that can appear in a presentational existential construction with *haver* 'have', such as in (2a). No other oblique clitic subject is available for this construction.<sup>3</sup> However, other impersonal existential constructions can show other oblique clitic subjects. This is the case of the deontic existential constructions in (2b-c). Their verbs express the existence of necessity, and –like their French and Sardinian equivalents, *falloir* and *kérrere* – they can coappear with an overt or covert animate dative clitic that indicates the person who is implicated or interested in the situation. In (5a) the clitic subject is a third person singular dative pronoun, whereas in (5b) the dative clitic is first person plural. In (5c) the pronominal subject is covert and thus receives an arbitrary meaning (= 'to someone', 'to the people').<sup>4</sup>

- (5) a. Li cal una biblioteca nova  
 to-him/her is-necessary a library new  
 '(S)he needs a new library'
- b. Ens urgeix una biblioteca nova  
 to-us is urgent a library new  
 'We urgently need a new library'
- c. Urgeix una biblioteca nova  
 is-urgent a library new  
 'A new library is urgently needed'

We will regard the oblique clitic in existential constructions as the logical subject of the sentence.<sup>5</sup> Similarly to other languages, like Icelandic, Catalan shows 'quirky subjects', subjects that are considered internal arguments and marked with oblique (dative or locative) inherent case plus an additional structural case feature (Chomsky 1998). For quirky subjects

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<sup>3</sup> The same requirement applies for French presentational constructions with *avoir* 'have', where the pronoun *y* is needed (*Il y a une bibliothèque* 'There is a library'). However, French needs an additional expletive, namely, the non-referential pronoun *il*, because it is a non-null subject language. See Rizzi (1997).

<sup>4</sup> These constructions are called relativized impersonal constructions or pseudo-impersonal constructions by traditional Romance grammarians. See Benot (1910: 143f), Par (1923:147f). See also Rigau (1999).

<sup>5</sup> On the proximity between dative and locative, see Jespersen (1924: chapter XIII).

in Spanish and other Romance languages, see Masullo (1993); Fernández-Soriano (1999); Longa, Lorenzo and Rigau (1997).

The DP *una biblioteca nova* 'a new library' in (4) is an object, although we will see that in some dialects it can manifest agreement with the verb. The fact that a nominative pronoun is not admitted in presentational and deontic existential sentences, as shown in (6), is a good proof that the element in the object position cannot be the subject of the construction, and that the sentence is impersonal.

- (6)
- a. \*Hi ha/has tu  
cl. has/have<sub>2d,sing.</sub> you
  - b. \*Et calia/calíem nosaltres  
to-you was/were<sub>1, pl.</sub>-necessary we
  - c. \*Vosaltres li cal/caleu  
you to-him/her is/are<sub>2d, pl.</sub>-necessary

The object of a deontic existential verb can be an infinitive clause. In fact, this kind of verb follows the Latin pattern shown in (7), a sentence with a dative subject (*mihi*), an impersonal verb that means modality (*licet*) and an object (the infinitive clause *negligenti esse*).<sup>6</sup> Deontic existential constructions with infinitive clause in object position are introduced in section 6.

- (7) In re publica mihi [negligenti esse] non licet (Cic. Att. 1, 17, 16)  
in thing public to-me negligent to-be not is-permitted  
'In matters of state I may not be negligent'

In Old Catalan there used to be many more such modal verbs that could appear in the impersonal form with a quirky subject. Most of them have now either disappeared or changed the syntactic behavior that they inherited from Latin (Par 1923: 147f). Thus, verbs like *convenir* 'to be advisable or necessary', *faltar* 'to be lacking or missing', or the complex verb *fer falta* 'to be necessary' have developed the capacity to check nominative case, and have followed the strategy of converting the object into a derived subject. Therefore, sentences with these verbs are not always impersonal sentences, as shown in (8), where a nominative pronoun agrees with the verb.<sup>7</sup>

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<sup>6</sup> Ernout & Thomas (1951: §231, 272) claim that the infinitive clause that coappears with Latin verbs meaning possibility, necessity, or convenience is "more their object than their subject".

<sup>7</sup> On the tendency of some Latin impersonal deontic verbs to become personal verbs accepting a neuter noun as a subject, and on the so-called 'partially impersonal' Latin verbs, such as *deceat* 'to be convenient', see also Ernout & Thomas (1951: §231).

- (8) a. Jo no us convinc  
       I not to-you<sub>pl</sub> am-necessary  
       'I am not useful to you'  
       b. Vosaltres no li feu falta  
       You<sub>pl</sub> not to-him/her make lack  
       '(S)he has no need for you'

At present, the use of the deontic verb *caldre* 'to be necessary' is on the wane in several Catalan dialects. In some dialects, like the Catalan spoken in the Balearic Islands, it has been completely lost.<sup>8</sup>

In the following section, we will concentrate on impersonal constructions with the verb *caldre*, and on their agreement pattern in two Catalan dialects, specifically in Central Catalan and Ribagorçan Catalan.

## 2. Verb-object agreement patterns

Catalan existential constructions follow two different strategies, as show in (9) and (10).

- (9) a. Oblique D    V<sub>sing</sub>    NP<sub>sing</sub>                  Ribagorçan Catalan  
       b. Oblique D    V<sub>sing</sub>    NP<sub>pl</sub>  
  
 (10) a. Oblique D    V<sub>sing</sub>    NP<sub>sing</sub>                  Central Catalan  
       b. Oblique D    V<sub>pl</sub>     NP<sub>pl</sub>

In Ribagorçan Catalan no agreement is shown between the existential verb and its NP object.<sup>9</sup> However, Central Catalan shows agreement between the verb and its object in

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<sup>8</sup> However, in those dialects where it enjoys good health, *caldre* is beginning to follow the strategy of marking the object with nominative case. Thus, some speakers use the verb *caldre* in agreement with a second person singular pronoun, as in (ia), in spite of the fact that, in principle, other personal forms are not possible, as shown in (6). The same process is visible in Sardinian (see Jones 1993: 101f). Nevertheless, Catalan speakers prefer other predicates when the personal pronoun is in the nominative case, as shown in (ib), where *fer falta* has the same meaning as *caldre* : 'to be necessary'.

- (i) a. ?Ens cals tu  
       to-us are<sub>2nd,sing</sub>-necessary you  
       'We need you'  
       b. Ens fas falta tu  
       to-us make<sub>2nd,sing</sub> lack you  
       'We need you'

existential constructions. This agreement is in number, not in person. No nominative first, second or third person pronoun is allowed in (10), as shown in (6).

The divergence with respect to verbal agreement with the nominal object is visible in the examples in (11)-(12).<sup>10</sup>

- (11)      a. Hi ha una cadira                      Ribagorçan Catalan  
                  cl. has a chair  
                  'There is a chair'  
              b. Hi ha tres cadires  
                  cl. has three chairs  
                  'There are three chairs'  
              c. Mos caleva una cadira  
                  to-us was-necessary a chair  
                  'We needed a chair'  
              d. Mos caleva tres cadires  
                  to-us was-necessary three chairs  
                  'We needed three chairs'

- (12)      a. Hi ha una cadira                      Central Catalan  
                  cl. has a chair  
                  'There is a chair'  
              b. Hi han tres cadires  
                  cl. have three chairs  
                  'There are two chairs'  
              c. Ens calia una cadira  
                  to-us was-necessary a chair  
                  'We needed a chair'  
              d. Ens calien tres cadires

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<sup>9</sup> The same behavior is visible with the existential verb *haver* and an indefinite NP object.

<sup>10</sup> In Standard (or Prescriptive) Catalan, similarly to Ribagorçan Catalan, no agreement is shown between the presentational verb *haver* and its object. However, like Central Catalan, Standard Catalan shows agreement between a deontic verb and its object. In fact, in this point Standard Catalan coincides with Balearic Catalan, as shown in (i).

- (i)        a. Hi ha estudiants / \*Hi han estudiants  
                  cl. has students / cl. have students  
                  'There are some students'  
              b. Mos toquen tres exercicis / \*Mos toca tres exercicis  
                  to-us is-obligated three exercises / to-us is-obligated three exercises  
                  'It is our turn to do three exercises'

to-us were3rd, pl.-necessary three chairs  
 'We needed three chairs'

In light of this data, two questions arise: Why is a quirky subject licensed in such sentences? Why do these dialects show such different behavior in existential sentences? The answers lie in the argument structure of the existential verbs, and in the properties of the functional category T.

Existential sentences (11)-(12) show the same basic argument structure. Its verb is a light verb in the sense that it acts as the host of a real predicate: a covert static preposition. This preposition can be defined as a preposition of 'central coincidence'. According to Hale (1986) and Hale and Keyser (1993, 1997, 1998a), a preposition of central coincidence is a preposition that expresses the relation whereby some entity is associated or in contact with another entity. It defines a relation of spatial contiguity between one entity (i.e. a place) and another entity (i.e. a thing, a substance, a measure, etc.). The complement of the preposition incorporated into the light verb *haver* 'have' in (9a) and (10a) is the NP *una cadira* 'a chair'. The subject required by the preposition to complete the interrelation between the two entities is the clitic *hi*, a clitic expressing a locative circumstance, as shown in (13) (see also Freeze 1992, Kayne 1993).

(13) [ [ v [ hi [ P/V[*ha*] *una cadira*] ] ] ]

The presentational existential verb *haver* 'have' is a pure light verb. It is in the sentence to allow the covert central coincidence preposition –namely, the real predicate– to be able to combine with temporal and aspectual morphemes. As represented in (13) the form *ha* is both a preposition and a verbal form (P/V). As a verb, it is able to move to T and to host temporal/aspectual morphemes. As a prepositional predicate it selects a complement and a locative clitic *hi* as its specifier, which can be defined as an impersonalizer (Rigau 1997; Longa, Lorenzo and Rigau 1998).

The argument structure of deontic existential verbs in (11c-d) and (12c-d) is schematically represented in (14), and it is basically similar to (13). However, the host of the central coincidence preposition in (14) is not an empty light verb, but a deontic verb. Because of their deontic property, those sentences express the existence of a need in some place or person for some entity (see Rigau 1999).

(14) a. [ v [ *mos* [ P/V[*caleva*] *una cadira*] ] ]  
 b. [ v [ *ens* [ P/V[*calia*] *una cadira*] ] ]



The lexical entry of the Catalan verb *caldre* in (14) contains an abstract preposition of central coincidence incorporated into a verb with a modal content. Etymologically, the Catalan verb *caldre* comes from the Latin verb *calere* 'to be hot, urgent', which comes from the Indo-European root *\*kel*, whose meaning was 'warm', but also 'cold'. In Latin this root acquired a modal content.<sup>11</sup>

As in (13), the inner predicate in (14) is not verbal, but prepositional, a predicate that has the property of being interrelational, that is, of requiring two arguments, one a complement, the other a subject (or specifier). However, as opposed to *haver* 'have', the modal verb acting as the host verb is not semantically empty.<sup>12</sup> The burden of its semantic properties are noted in the fact that the complement of P/V in (14) can be an NP, a DP or an infinitive clause, and that its specifier can be an inanimate or animate dative (or oblique) clitic: Central Catalan: *ens* 'to-us, us<sup>pl</sup>-to-you<sup>pl</sup>;', *em* 'to-me', *hi* 'to-it, here', etc.; Ribagorçan Catalan: *mos* 'to-us', *vos* 'to-you<sup>pl</sup>;', *mi* 'to-me', *hi* 'to-it, here', etc.<sup>13</sup>

In other Romance languages the abstract preposition in (14) can have phonological content. For instance, in Italian, the verb *bisognare* co-occurs with the verb *abbisognare* (= *a(d)-bisognare*). In contrast to the verb *bisognare*, the verb *abbisognare* appears with a dative argument and the complement can be a NP, as shown in (15) from Benincà and Poletto (1994).

- (15) Mi   abbisogna   una certa somma  
       medat is-necessary a certain amount  
       'I need a certain amount of money'

<sup>11</sup> It probably became an ergative adjective. According to Cinque (1990: 7), most of the Italian modal adjectives belong to the ergative class. Actually, the behavior of *caldre* in some aspects is similar to the modal adjectival predicates like *ser probable* 'to be probable', *ser necessari* 'to be necessary' (see Rigau 1999). For the etymology of *caldre*, see Pokorny (1959).

<sup>12</sup> The structure depicted in (14) agrees broadly speaking with that proposed by Hoekstra (1994) for some Hungarian and French modal verbs. According to Hoekstra, the structure underlying the Hungarian modal verb *kell* 'to be necessary' and the French modal verb *falloir* 'to be necessary' is the following: MODAL [DP X YP], where X stands for a D/P. These deontic verbs select a dative argument.

<sup>13</sup> In Catalan, when the verb *caldre* selects an inflective subjunctive clause, as in (i), it does not appear with a dative clitic. We argue that its argument structure is not so complex as in (14). In (i), the complement of the verb is a finite CP. No preposition is incorporated.

- (i) a. Cal       que       estudiïs  
       is-necessary that (you) study  
       'You really need to study'  
       b. \*Em cal que estudiïs  
       to-me is-necessary that (you) study

Consider now the case of the object of an existential verb. It can be partitive case, as shown by the fact that the object can be a bare NP, and can be represented by the partitive clitic pronoun *en* :

- (16) a. *Hi ha farina*  
           cl. has flour  
           'There is some flour'  
       b. *N'hi ha*  
           part. cl. has  
           'There is some of it'  
       c. *Ens caldrà farina*  
           to-us will-be-necessary flour  
           'We will need some flour'  
       d. *Ens en caldrà*  
           to-us part. will-be-necessary  
           'We will need some of it'

In Rigau (1997) it is argued that the incorporation of the stative preposition into the existential verbs allows them to assign partitive case. Hence, partitive case is considered an instance of the inherent case that the preposition is able to assign when incorporated into the host verb. Moreover, deontic existential verbs are able to coappear with a DP object in accusative case. This is visible in the grammatical Ribagorçan Catalan sentences in (17). Note that the animate direct object in (17b) is preceded by the preposition *a* 'to'. This preposition acts as an accusative marker in Spanish and in some Catalan dialects (see Torrego 1998).<sup>14</sup>

- (17) a. *Hi cal istes cadires*                      Ribagorçan Catalan  
           cl. is-necessary these chairs'  
           'These chairs are needed here'  
       b. *Mos cal a la teua veïna*  
           to-us is-necessary to the your neighbour  
           'We need your neighbour'  
       c. *No me les cal (, istes cadires)*  
           not to-me them is-necessary these chairs

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<sup>14</sup> Actually, the Latin impersonal verb *habet* could also select an accusative object, as argued by Ernout & Thomas (1956: §230c): "Dès le début de l'époque impériale...*habet* apparaît aussi au sens de 'il y a', avec un accusatif d'objet: par ex., Volpisc., Tac. 8. I (Script. H. Aug.): *habet in bibliotheca Vlpia librum elephantinum* 'il y a dans la bibliothèque Ulpia un livre d'ivoire'.

'(As for these chairs,) we don't need them'

Sentences in (17) are ungrammatical in Central Catalan. As shown in (18), this dialect follows the strategy of showing number agreement between the verb and its object:<sup>15</sup>

- (18)      a. Ens cal la teva veïna                      Central Catalan  
              to-us is-necessary the your neighbour  
              'We need your neighbour'  
              b. Hi calen aquestes cadires  
                  cl. are-necessary these chairs'  
                  'These chairs are needed here'  
              c. \*No me les cal (, aquestes cadires)  
                  not to-me them is-necessary these chairs  
              d. No em calen aquestes cadires  
                  not to-me are-necessary these chairs  
                  'I don't need these chairs'

Central Catalan grammatical sentences in (18) do not belong to Ribagorçan Catalan.

### **3. The impersonal character of deontic existential sentences and their agreement abilities.**

In order to account for the facts depicted in (9) and (10), we will now characterize the universal principles which underlie the existence / non-existence of agreement between the verb and its object. Secondly, we will delimit the parameters of variation. The choice of one or the other value for these parameters accounts for the bifurcation between Catalan dialectal grammars.

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<sup>15</sup> Number agreement is incompatible with the presence of the accusative preposition *a* 'to' or with an accusative clitic, as shown in the Spanish examples in (i) with the passive clitic pronoun *se*.

- (i)      a. Se buscan dos maestros / \*Se los buscan  
              cl. seek two teachers / cl. them seek  
              'Two teachers are sought'  
              b. Se busca a dos maestros / Se los busca  
                  cl. seeks to two teachers / cl. them seek  
                  'Two teachers are sought.'  
              c. \*Se buscan a dos maestros  
                  cl. seek to two teachers

In some Spanish dialects the verbal object manifests number agreement with the verb when the passive clitic *se* absorbing the external argument is present, as in (ia). In other dialects, there is no agreement between the verb and its object in passive clitic *se* constructions, as shown in (ib), where the object is in accusative case. See Torrego (1998).

3.1. Following Chomsky (1999: 4), we assume that some categories have uninterpretable (or unvalued) features, which have to be assigned a value in order to be able to receive an interpretation at the interface of the computational system with other cognitive systems. When an uninterpretable feature is not valued, it is not erased, and the derivation crashes. A feature may receive a value and be erased as uninterpretable under Agree. According to Chomsky (1999:4), the operation of Matching of two elements, a probe and a goal, induces Agree, which eliminates the uninterpretable features that activate those elements. However, both the element that acts as the probe and its goal must be active (i.e. visible) for Agree to apply. This means that the probe has to be non-defective. In Chomsky's words: the probe must have a complete set of  $\phi$ -features<sup>16</sup> to delete uninterpretable features of the paired matching element.

Moreover, according to Chomsky (1999:3), structural case itself is not matched, but it is determined (and erased) under matching of  $\phi$ -features. It is worth noting here that case-determination (or case-assignment) and EPP-feature deletion are independent phenomena.<sup>17</sup> Structural case correlates with agreement (Chomsky 1999: fn. 18).

3.2. We will be able to account for the impersonalizer function of quirky clitic subjects in Catalan (and Romance) assuming that oblique clitics have the L(ocative) property. As pointed out by Hale and Keyser (1998b:11f), many languages –e.g. Navajo– have ‘locative’ or ‘areal’ agreement in addition to conventional person and number agreement. It seems convincing to analyze Romance quirky clitic subjects as overt or covert determiners with the feature L among their interpretable features, as in (19)<sup>18</sup>:

(19) Oblique clitic  $\phi$ -features: L [person, number, ...]

L is a locative property of oblique (i.e. dative and locative) clitics. In other words, from a morphological point of view, a dative clitic can be first, second or third person. However, because of its L property it will act as locative (i.e. impersonal) determiner. Similarly, a dative clitic can be morphologically singular or plural, but the property visible for the computational system is its L-number property. Hence, it acts as a determiner in the

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<sup>16</sup>  $\Phi$ -features are features of person, number, gender, etc., which are interpretable in lexical categories, but uninterpretable in functional categories.

<sup>17</sup> EPP feature is the property that expresses the need of some functional category -e.g. Tense- to have a subject (or specifier). See Chomsky 1995.

<sup>18</sup> Contrary to other Romance languages like Italian (*gli* 'to him/her'; *le* 'to them'), Catalan dative clitics do not manifest gender.

unmarked number.<sup>19</sup> This analysis of dative (and locative) clitics seems compatible with Kayne's dative clitics analysis. According to Kayne (1999), who follows a suggestion by A. Rouveret, the dative clitic has incorporated a covert dative preposition. For this reason, Romance dative clitic doubling necessarily involves preposition doubling, as shown in (20) for Catalan.

- (20) a. Ens caldrà bona sort a tots  
           to-us will-be-necessary good luck to all  
           'All of us will need good luck'  
       b. A la meva habitació hi cal una capa de pintura  
           in the my room cl. is-necessary a coat of paint  
           'My room needs a coat of paint'

The PP *a tots* 'to all' is doubling the animate dative clitic *ens*, whereas the PP *a la meva habitació* 'in my room' is doubling the inanimate dative clitic *hi*.

In parametric terms, we assume that the functional category T can manifest the L property in its person feature or in both person and number features.<sup>20</sup> In Romance existential sentences, T matches the oblique D in its L-person feature. This operation induces an agreement relationship between T and the oblique D, which is expressed morphologically as third person. According to Benveniste (1996), third person is the morphological expression of the default person feature in languages like Romance. Hence, L-person feature in T is valued

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<sup>19</sup> Nevertheless, usual morphological restrictions apply to constructions with the verb *caldre*, e.g. the Person-Case constraint (Kayne 1975, Bonet 1991: 181f), as shown in (i). The accusative clitic co-occurring with the dative clitic has to be third person.

- (i) a. Medat la<sub>acc</sub> cal (, a ta germana)                      Ribagorçan Catalan  
           to-me her is-necessary (to your sister)  
           'I need her'  
       b. \*Medat te<sub>acc</sub> cal / \*Te<sub>acc</sub> medat cal  
           to-me you is-necessary / you to-me is-necessary

<sup>20</sup> In Navajo examples in (i) the functional category manifesting L-property is *v*. Navajo Areal Agreement (example (14) in Hale and Keyser 1998):

- (i) a. Béégashii yish'í  
           cow 3o.YPERF.1s.see.PERF  
           'I see the cow'  
       b. Bikooh-góyaa hweesh'í  
           arroyo-down along AREALo.YPERF.1s.see.PERF  
           'I see down along the arroyo'

Hale and Keyser (1998b:11f) suggest that this type of agreement is involved in English constructions based on the *there*-insertion unaccusatives.

under Agree, and T simultaneously determines the additional structural case in the quirky subject.

If in addition T has L-number, this feature matches L-number in oblique D. However, if number feature in T is not L-number feature (i.e. it is  $\alpha$ -number<sup>21</sup>), it is unable to agree in number with oblique D and to receive a value. In this case,  $\phi$ -features in T are not completely inactivated. Consequently, number feature is inactivated in T separately from person feature (see Chomsky 1998, Rigau 1991, 1997, Sigurdsson 1996, among others). On the other hand, oblique D erases the EPP-feature in T under raising to the specifier position in T (i.e. spec-T).

The choice of L-number or  $\alpha$  number in existential constructions accounts for the bifurcation between Catalan dialectal grammars:

- (21)     a.  $\Phi$ -features in T: [L-person, L-number]     Ribagorçan Catalan  
          b.  $\Phi$ -features in T: [L-person,  $\alpha$  number]     Central Catalan

In Ribagorçan Catalan L-person in T implies L-number, namely when T is impersonal (i.e. L-person), its number property has the Locative property (L-number). However, in Central Catalan, number in T can be specified as singular or plural (i.e.  $\alpha$ -number) even if T is impersonal.

3.3. Moreover, in Catalan as in other languages T can select either a complete  $v$  (represented by  $v^*$ ) or a weak verbal configuration  $v$  with or without  $\phi$ -features, but lacking the EPP-feature (see Chomsky 1999).

Under the approach described in 3.2 and 3.3, T and  $v$  are the locus of parametric variation shown in (11)-(12) and (17)-(18).

Before proceeding to an analysis of the data, we must express our position relative to partitive NPs, such as the object NPs in (16). According to Chomsky (1998: fn. 88), pure inherent case, i.e. partitive case, inactivates the  $\phi$ -features set in a noun. Our claim is that partitive case does not inactivate them, but that a noun with partitive case is unable to satisfy the EPP-feature.<sup>22 23</sup>

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<sup>21</sup> Where  $\alpha$ -number has singular or plural value in Catalan.

<sup>22</sup> EPP feature has to be satisfied by a DP. A bare NP or a PP are unable to do it. For the inability of a PP not related to an overt or covert clitic to satisfy EPP in French, see Kayne and Pollock (1999).

<sup>23</sup> The possibility that nouns do not need case and that case is a necessity only for DPs has to be considered. (N. Chomsky, p.c.).

#### 4. Analysis

In this section we will analyze the presence or absence of morphological concord between the existential deontic verb and its object in Catalan dialects. The sentences we are going to analyze are those in (22).

- |      |   |                    |
|------|---|--------------------|
| (22) | a. Mos caleva cadires                           | Ribagorçan Catalan |
|      | to-us was-necessary chairs                      |                    |
|      | 'We needed some chairs'                         |                    |
|      | b. Ens calien cadires                           | Central Catalan    |
|      | to-us were <sub>3rd, pl</sub> -necessary chairs |                    |
|      | 'We needed some chairs'                         |                    |
|      | c. Mos caleva istes cadires                     | Ribagorçan Catalan |
|      | to-us was-necessary these chairs                |                    |
|      | 'We needed these chairs'                        |                    |
|      | d. Ens calien aquestes cadires                  | Central Catalan    |
|      | to-us were 3rd pl.-necessary these chairs       |                    |
|      | 'We needed these chairs'                        |                    |

Sentences in (22a) and (22c) show that in Ribagorçan Catalan the deontic existential verb does not enter into agreement with its definite or indefinite object, whereas Central Catalan sentences in (22b) and (22d) show number agreement between the verb and its definite or indefinite object. In all these sentences the oblique D satisfies the EPP feature in T (i.e. the need for a subject for the sentence) rising to the specifier position of T. The object cannot move to this position because oblique D is closer. See Chomsky (1998, 1999) on intervention effects.

4.1. Let us begin by analyzing the Ribagorçan Catalan sentence in (22a), in which the verb does not manifest morphological concord with the NP. This means that T matches its uninterpretable L-person and L-number features with the oblique D. Through this agreement operation, T is able to determine the structural case of the oblique D. Because the functional category *v* is not complete in these sentences, it has no uninterpretable features. At the same time, other movement operations have to take place: V moves to T to match its temporal features, and probably the oblique clitic moves to a functional category for clitics (Kayne

1994: 42).<sup>24</sup> Consider the schematic representation in (23), where all uninterpretable features have to be erased for the convergence of the derivation.

- (23) a. [ ... [ T                  [ ν [ oblique D                  P/V                  N ]]]  
uninter. φ-features                  inter. φ-features  
*mos*                                  *caleva*                                  *cadires*
- b. [ ... [T oblique D    [T P/V T]] ...        N     ]]  
*mos*                                  *caleva*                                  *cadires*

Contrary to Ribagorçan, the Central Catalan equivalent sentence in (22b), repeated below, shows morphological concord in number between the verb and its object, although the sentence is impersonal. There is no person agreement in these constructions, as shown in (6). What causes the divergence between Ribagorçan and Central Catalan is just one of the  $\phi$ -features in T: number feature, which is not specified as a L(ocative) feature, but  $\alpha$  number. Consequently, T cannot match in number with the oblique D, and it has to find another element with an interpretable number feature in order to assign a value to its number feature. This element is the noun *cadires*, which is plural.<sup>25</sup>

- (22) b. Ens calien cadires Central Catalan  
to-us were<sub>3rd</sub>, pl-necessary chairs  
'We needed some chairs'

- (24) a. [ ... [ T [ v [ oblique D P/V N ] ] ] ]  
 uninter. L-person inter.  $\phi$ -features inter  $\phi$ -features  
 uninter.  $\alpha$ -number  
*ens calien cadires*
- b. [ ... [ T oblique D [ T P/V T ] ] ... N ] ]  
*ens calien cadires*

As in (23), in (24) T matches its L person feature with oblique D. Because of this agreement operation, T determines the additional structural case in oblique D.

<sup>24</sup> Before moving to T, deontic verbs probably have to move to a Deonty Modal head, a functional category that expresses the deontic modality information of the sentence. Another possibility is to consider that the deontic verb is originated in the Deonty Modal head. See Cinque (1999).

<sup>25</sup> Obviously T matches with singular number feature in N in the Central Catalan sentence: *Ens calia una cadira* 'to-us was necessary a chair' 'We needed a chair'.





- (22) d. Ens calien aquestes cadires Central Catalan  
to-us were<sub>3rd, pl</sub>--necessary these chairs  
'We needed these chairs'

- (26) a. [... [ T [  $\nu$  [ oblique D P/V D ] ] ]  
uninter. Lperson inter.  $\phi$ -features inter.  $\phi$ -features  
uninter.  $\alpha$ -number  
ens calien aquestes cadires
- b. [ ... [ T oblique D [ T P/V T ] ] ... D ]  
ens calien aquestes cadires

Briefly, consider the derivations in (27), which would crash in Ribagorçan Catalan.

- (27) a. [ T [L-person, L-number]  $\nu$  .... D ]: It cannot converge because the uninterpretable structural case feature in D is not determined, because there is no agreement between number feature in T and number feature in D.
- b. [ T [L-person, L-number]  $\nu^*$  .... N ]: It cannot converge because the EPP feature in  $\nu^*$  is not erased (see fn. 27).

The derivations in (28) show why an impersonal Central Catalan structure will crash if T selects  $\nu^*$ . The functional category  $\nu$  will always be incomplete in Central Catalan sentences with an impersonal T.

- (28) a. [ T [L-person,  $\alpha$ number]  $\nu^*$  .... N ]: It cannot converge because the EPP feature in  $\nu^*$  is not erased (see fn. 27).
- b. [ T [L-person,  $\alpha$ number]  $\nu^*$  .... D ]: It cannot converge because D cannot match its  $\phi$ -features both with  $\nu^*$  and ( $\alpha$ -number) T.

In the next sections we will show that the same pattern of parametric variation is followed by other existential sentences in Catalan as well as other Romance languages.

## 5. Some extensions of the analysis

- 
- (i) (Aquestes cadires,) no ens calien *pro*  
these chairs not to-us were-necessary *pro*  
'(As for these chairs) we didn't need them'

The behavior of *caldre* is not an isolated case, but rather one instance of a phenomenon that is quite common in Catalan and other Romance languages. Compare the sentences in (29) and (30), sentences where dialectal divergence with respect to verbal agreement with the nominal object is also visible. Where Ribagorçan Catalan shows no agreement, Central Catalan has a strong tendency to show agreement between a verb and its object.

- (29) a. Hi ha estudiants                      Ribagorçan Catalan  
           cl has students  
           'There are some students'
- b. (Ens) ha fet uns dies molt assoleïats  
           to-us has made some days very sunny  
           'We've had some very sunny days'
- c. (En aquesta coral) hi canta nens  
           in this choir            cl. sings boys  
           'There are boys in this choir/Some boys sing in this choir'
- d. Li ve ganes de dormir  
           to-him/her comes desires of to-sleep  
           '(S)he is getting sleepy'
- e. Sovint t'agafava atacs de tos  
           often to-you took<sub>sing.</sub> attacks of cough  
           'You often used to have coughing fits'
- 
- (30) a. Hi han estudiants                      Central Catalan  
           cl. have students  
           'There are some students'
- b. (Ens) han fet uns dies molt assoleïats  
           to-us have made some days very sunny  
           'We've had some very sunny days'
- c. (En aquesta coral) hi canten nens  
           in this choir            cl. sing boys  
           'There are boys in this choir/Some boys sing in this choir'
- d. Li vénen ganes de dormir  
           to-him/her come desires of to-sleep  
           '(S)he is getting sleepy'
- e. Sovint t'agafaven atacs de tos  
           often to-you took<sub>pl.</sub> attacks of cough  
           'You often used to have coughing fits'

It was argued in Rigau (1997) that these sentences undergo the incorporation of an empty central coincidence preposition, which gives them a stative, or existential, meaning. All of them are impersonal and the subject is an overt or covert clitic in the oblique case. In Ribagorçan no agreement is shown between the verb and the DP object. They are impersonal sentences. The construction in (29a) is a presentational existential sentence with the verb *haver* 'have'. In (29b) the verb *fer* 'to do, to make' has lost its agentive meaning and acts as a light verb that describes atmospheric conditions. In (29c) the abstract preposition of central coincidence is incorporated into the unergative verb *cantar* 'to sing'. Consequently, the verb loses its agentive meaning and becomes a stative verb that expresses the property of a place or an entity: in this case, the choir. It means that there are some boys who belong to the choir as singers<sup>29</sup>. The verb in (29d) is the unaccusative verb *venir* 'to come'. Because of the incorporation of the preposition of central coincidence, the sentence has a stative meaning: it expresses a property of the person to whom the pronoun refers, namely, that he is sleepy.<sup>30</sup> The sentence (29d) is a case of a transitive verb used as an existential predicate. An overt or covert dative clitic subject is obligatory when a transitive verb is used as a non-agentive verb. This implies that a static preposition has become incorporated into the verb.<sup>31</sup>

Sentences in (30) are as impersonal as those in (29). The only difference is that the DP object manifests number agreement with the verb. Similarly to sentences with *caldre*,

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<sup>29</sup> See Mateu and Rigau (2000) for a detailed analysis of the argument structure of this existential construction.

<sup>30</sup> If a referential DP appears in sentences (29c) and (30c), they lose their stative meaning, and the existential meaning is not possible.

- (i) Hi canten ells  
 cl. sing they  
 'They are singing here/there'

In (i), no static preposition is incorporated into the verb, and the person feature in T does not have the Locative property. Consequently, the verb agrees with the DP even in Ribagorçan Catalan.

Like Ribagorçan, Sardinian does not manifest agreement in constructions such as (29c). Jones (1993: 195) also notes that the presence of a DP causes the ungrammaticality of the sentence:

- (ii) a. B'at ballatu tres pitzinnas  
 cl. has danced three girls  
 'Three girls danced'  
 b. \*B'at ballatu cussos pitzinnas  
 cl. has danced these girls

Regarding (29c) and (30c), see Torrego (1989), who argues that an initial locative phrase in Spanish and a locative clitic in Catalan allow a partitive NP with an unergative verb. See also Moro (1993), who considers the unaccusativity as an epiphenomenon.

<sup>31</sup> I thank J. Mateu for calling my attention to this verb.

sentences in (29) and (30) show us the two different strategies that these two Catalan dialects follow to assign a value to the uninterpretable feature in T.

A few words must be said about the presentational existential verb *haver* 'to have'. In Ribagorçan and Central Catalan, when the object is an indefinite NP, the behavior of the verbs *haver* and *caldre* is parallel, as far as verbal concord is concerned (see (11) and (12)). But this is not the case when the object is a DP: Ribagorçan Catalan uses the copulative verb *ser* 'to be', whereas Central Catalan uses *haver* 'to have', as shown in (31) and (32).<sup>32</sup>

- (31) a. *Hi e Maria*                      Ribagorçan Catalan  
           cl. is Mary  
           'Mary is here/there'  
       b. \**Hi ha Maria*  
           cl. has Mary
- (32) a. \**Hi és la Maria*<sup>33</sup>                      Central Catalan  
           cl. is the Mary  
       b. *Hi ha la Maria*  
           cl. has the Mary  
           'Mary is here/there'

Note that Central Catalan uses the verb *haver* 'to have' when the DP is non-pronominal and in a postverbal position. Otherwise, the verb *ser* 'to be' is used. Therefore, in both dialects, the DP subject may appear in a preverbal position with the verb *ser*. In this construction, the clitic *hi* is not the only locative element that can appear in the sentence, as shown in (33), examples which belong to both Ribagorçan and Central Catalan.

- (33) a. *Les dones hi són*  
           the women cl. are  
           'The women are here/there'  
       b. *(La) Maria és a Lleida*  
           the Mary is in Lleida  
           'Mary is in Lleida'

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<sup>32</sup> However, this is not a general fact in Northwestern Catalan dialects. Thus, in the dialect spoken in Segrià, (32b) is grammatical and (32a) ungrammatical, unless the DP is right-dislocated.

<sup>33</sup> In Central Catalan, personal proper nouns coappear with a definite determiner. Construction (32a) is ungrammatical as a declarative sentence. However, if *la Maria* is right-dislocated, the construction is grammatical: *Hi és, la Maria*. 'As for Mary, she is here'.

In (33a) the clitic *hi* is a true predicate, not a subject clitic, whereas in (33b) the predicate of the sentence is the locative preposition *a* 'in'. Therefore, *hi* in (33a) can stand for a PP, e. g. *a Lleida* 'in Lleida'. For motivation of this analysis, see Rigau (1997).<sup>34</sup>

Our analysis of existential sentences can be extended to constructions with the impersonalizer clitic *se*.

- (34)      a. Es pot tancar les finestres                      Ribagorçan Catalan  
                  cl. can/maysing. close the windows  
                  'The windows can be closed'  
              b. Es poden tancar les finestres                      Central Catalan  
                  cl. canpl. close the windows  
                  'The windows can be closed'

The clitic *se* has L-person, and L-number features. In Ribagorçan, the node T assigns value to its L-person and L-number features through an agreement operation with the clitic. Hence, the finite verb does not agree with the DP object. Nevertheless, in Central Catalan, T is L-person but  $\alpha$ -number. Consequently, T agrees with the DP object in number. Nevertheless, there is an important difference between the impersonal sentences in (34) and existential constructions. In (34) no central coincidence preposition has been incorporated into the verb. The clitic *se* originates in the specifier position of a complete *v* (or *v*\*) and occupies the position of an external argument.

When the clitic *se* coappears with an unergative verb, as in (35), T in Central Catalan has to check its  $\alpha$ -number feature with an expletive *pro*.<sup>35</sup> In Ribagorçan no expletive pronoun is necessary.

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<sup>34</sup> It should be noted that the verb *haver* 'to have' shows sensitivity to tense/aspect in Ribagorçan. It cannot be used in imperfective past tense, and the verb *ser* 'to be' has to be used instead. This is true for indicative or subjunctive presentational constructions as well as for the auxiliary selection in past perfect tense. On the sensitivity of auxiliary selection to tense in Romance, see Kayne (1993).

- (i)        a. Hi era moltes dones  
                  cl. was many women  
                  'Many women were here/there'  
              b. Si hi fos molta gent, ...  
                  if cl. weresubjunctive many people  
                  'If there were many people, ...'  
              c. Ell era parlat / Ell ha parlat  
                  he was spoken / he has spoken  
                  'He had spoken / He has spoken'

<sup>35</sup> However, see Picallo (1999).

- (35) Es treballa massa  
 cl. works too-much  
 'People work too much'

## 6. Presence/absence of clitic climbing

At first glance, the presence/absence of number agreement between the verb *caldre* and its object in Central Catalan and Ribagorçan seems to correlate with the absence/presence of the clitic climbing property in *caldre* + infinitive clause constructions. Compare Central Catalan sentences in (36) with their Ribagorçan equivalents in (37).

- (36) a. No et caldria visitar-la                      Central Catalan  
           not to-you would-be-necessary to-visit her  
           ....'You wouldn't need to visit her'  
       b. Ens calia fe'l (=fer-lo)  
           to-us was-necessary to-do it  
           'We needed to do it'  
       c. No us                      cal anar-hi  
           not to-you<sub>pl.</sub> is-necessary to-go there  
           'You don't need to go there'
- (37) a. No te        la caldria visitar                      Ribagorçan Catalan  
           not to-you her would-be-necessary to-visit  
           ....'You wouldn't need to visit her'  
       b. Mos el caleva fer  
           to-us it was-necessary to-do  
           'We needed to do it'  
       c. No vos                      hi cal anar  
           not to-you<sub>pl.</sub> cl. is-necessary to go  
           'You don't need to go there'

In Ribagorçan, clitics belonging to the embedded clause have to move to the main clause in order to reach a functional category that they may adjoin. This means that the embedded clause is defective in this dialect, and that there is no C(omplementizer) node selected by V that determines a phase. However, in Central Catalan the object of the verb *caldre* is a non-defective embedded clause, i.e. a CP. In this dialect the infinitive clause has an active functional category for clitics.

- (38) a. [C [ T [V cal [T T V clitic...]]] Ribagorçan Catalan  
 b. [C [ T [V cal [C [T T V clitic...]]] Central Catalan

The embedded node C in (38b) determines a phase. No clitic can move to the main clause, whereas in (38a) there is only one phase determined by C. In both structures in (38) the *vP* is a weak verbal configuration, so it does not determine a phase (see Chomsky 1999: 9).

In spite of the data in (36) and (37), it would be risky to claim that there is a correlation between the lack of morphological concord and the clitic climbing, for instance, that the L-number property in T is responsible for the defective character of the infinitive clause, and the fact that the embedded node T, which is defective, is linked to the matrix T. Other languages that follow the agreement pattern of Ribagorçan, e.g. French and Aragonese, do not show clitic climbing. The Aragonese verb *caler* does not have plural forms, yet the clitics selected by the embedded infinitive verb remain in the subordinate clause, as shown in the sentences in (39) from Nagore (1989: 207, 49).<sup>36</sup>

- (39) a. De diners no te'n caleba  
 of money<sub>pl.</sub> not to-you part. is-necessary  
 'You didn't need money'  
 b. No te cal sacar-lo  
 not to-you is-necessary to-take-out it  
 'You don't need to take it out'  
 c. (L'aragonés) cal fablar-lo y escribir-lo  
 the Aragonese is-necessary to-speak it and to-write it  
 'As for Aragonese, it is necessary to speak and write it'

On the other hand, the Ribagorçan reflexive clitic *si* 'herself/himself' remains in the embedded clause (see Rigau 1999):<sup>37</sup>

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<sup>36</sup> Contrary to Ribagorçan Catalan, an accusative clitic cannot coappear with *caler* in Aragonese (F. Nagore, p.c), as shown in (i). See Kayne (1989:249) about the correlation between clitic climbing out of the infinitival complement of an impersonal verb and the possibility of accusative case on the post-verbal DP.

(i) \*Te las cal  
 to-you them is-necessary

<sup>37</sup> It may be that the Ribagorçan reflexive clitic *si* is able to adjoin a defective (or partially active) functional category for clitics belonging to the embedded clause because of its 0-person and 0-number features. On the features of reflexive clitics, see Kayne 1993, 1998.



- (40) a. \*No li si cal rentar  
           not to-him/her himself/herself is-necessary to-wash  
       b. No li cal rentar-si  
           not to-him/her is-necessary to-wash himself/herself  
           '(S)he doesn't need to wash herself/himself'

Further data and studies are necessary to reach a well firmly grounded conclusion about the possibility of correlation between the lack of agreement and clitic climbing.<sup>38</sup>

## 7. Deontic existential sentences in other Romance languages

The data analyzed in section 4 shows us that Ribagorçan Catalan follows the strategy of other Romance languages and dialects like French, Occitan, and Benasquese –a dialect of transition between Ribagorçan and Aragonese. No morphological concord is manifested between the verb and its object, which shows accusative case, as illustrated by the accusative clitic in (41).

- (41) a. Il    nous faut                ces chaises French  
           expl to-us is-necessary these chairs  
           'We need these chairs'  
       b. Il    nous les                faut  
           expl to-us them<sub>acc</sub> is-necessary  
           'We need them'  
       c. Mos    cau                aguestes cagires                Aranese Occitan  
           to-us is-necessary these chairs  
           'We need these chairs'  
       d. Mos les                cau  
           to-us them<sub>acc</sub> is-necessary  
           'We need them'  
       e. Mos    cal                istas sillas                Benasquese  
           to-us is-necessary these chairs  
           'We need these chairs'  
       f. Mos les                cal  
           to-us them<sub>acc</sub> is-necessary  
           'We need them'

<sup>38</sup> See Benincà and Poletto (1994) and Guéron (1999) for the Italian deontic verb *bisognare* 'to be necessary', which can select a finite or an infinitive clause.

Because French is a non-null subject language, an expletive pronoun *il* has to appear in its impersonal sentences. This expletive element can be considered a parasitic element, in the sense that it has no role in the argument structure of the existential predicate.

The behavior of *kérrere* 'to be necessary' in Sardinian is partially similar to Ribagorçan. No morphological concord is manifested between the verb and its NP object, as shown in (42a), where *bi* is a locative clitic pronoun. However, when the object is a DP, it agrees in person and number with the verb, as shown in (42b). Both examples are from Jones (1993: 101f).

- (42) a. Bi keret tres ovos  
cl. is necessary three eggs  
'Three eggs are necessary'  
b. Non bi keres tue inoke  
not cl. are 2d sing. -necessary here  
'You are not needed here'

Sentences in (42) show that in Sardinian the deontic verb *kérrere* has a double behavior. The sentence in (42a) is an existential construction with a quirky subject (the clitic *bi*), whereas (42b) is a personal sentence and the clitic *bi* is a clitic object. We assume that T has the Locative property only in (42a). Therefore, the Sardinian deontic verb *kérrere* acts similarly to the Catalan deontic verbs *convenir* 'to be advisable' and *fer falta* 'to be necessary' mentioned in section 1. The DP object of these verbs acts as a derived subject, but not its NP object, as shown in Ribagorçan Catalan examples in (43).

- (43) a. Vosaltres no mos feu falta  
youpl. not to-us make2d, pl. lack  
'We have no need for you'  
b. Mos fa falta tres cadires  
to-us makes lack three chairs'  
'We need three chairs'

On the other hand, deontic existential sentences in Central Catalan follow the strategy of Spanish, Galician and Portuguese. The verb and the DP object show morphological concord, as in (44).

- (44) a. Nos urgen estas sillas  
to-us are-urgent these chairs  
'We urgently need these chairs' Spanish

- b. Cómprenme estas cadeiras                      Galician  
       are-necessary to-me these chairs  
       'I need these chairs'
- c. Cumpren-nos os deveres que a Igreja impõe      Portuguese  
       are-necessary to-us the obligations that the Church imposes  
       'We are bound by the obligations that the Church imposes upon us'

In light of what we see in (41) and (44), we can conclude that T in existential constructions in French, Occitan and Benasquese is L-person and L-number, whereas in Spanish, Galician, and Portuguese, T is L-person, but  $\alpha$ -number.

## 8. Concluding remarks

This paper accounts for the dialectal variation in Catalan deontic existential constructions by showing that the deletion of  $\phi$ -features in T is not necessarily simultaneous. The value of the person and number features in T is determined separately in existential constructions in Central Catalan and certain other Romance languages, whereas in Ribagorçan Catalan, like French or Occitan,  $\phi$ -features in T are assigned values simultaneously. Furthermore, this paper provides empirical evidence for Agree (and case-determination) as an independent operation of the EPP-feature satisfaction. In Central Catalan, T and the object D agree even when D does not erase EPP-feature in T.

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