

**Authors:**

Artemis Alexiadou  
 Humboldt-Universität zu Berlin  
[artemis.alexiadou@hu-berlin.de](mailto:artemis.alexiadou@hu-berlin.de)

Janayna Carvalho  
 Universidade de São Paulo  
[janaynacarvalho@usp.br](mailto:janaynacarvalho@usp.br)

**Language Index:**

Brazilian Portuguese (BP): all pages  
 Greek: 2-4; 17-19; 26-27  
 Finnish: 2-8, 10-12, 14.15, 17-22, 24-27  
 Thai: 24

**Subject Index:**

EPP: 2-4; 11-12; 15-18; 20-22; 26-27  
 Impersonals: 2-8; 10-15; 17; 22; 25-27  
 INFL: 22; 25-27  
 Locative(s): all pages  
 Null subject: 5  
     Null subject in embedded clauses: 4-6, 20-22  
     Generic (null) subject: 4; 6; 10  
 Null generic pronoun: 4; 6; 14; 24  
 (Full/Partial/Radical) pro-drop language: 2-5; 8; 17-20; 24; 26  
 Tense: 22; 25; 27

# The role of locatives in (partial) pro-drop languages

## Abstract

*It is usually assumed that a difference between pro-drop and non-pro-drop languages is the presence of overt expletives in the latter group, but not in the former (cf. Rizzi 1982; 1986, Alexiadou & Anagnostopoulou 1998). Compared with this two-way classification, partial pro-drop languages, i.e. languages in which the distribution of pro is more restricted, are intriguing case studies. Unlike in English, for example, the satisfaction of EPP can be done in several ways in this group of languages. Fruitful strategies include remerging deictic elements, such as locatives and temporal adjuncts, or raising of internal arguments. As locatives are elements usually employed by all the languages that fall into this category as a means to satisfy the EPP, our comparison will focus on the use of these elements in two partial pro-drop languages, namely Brazilian Portuguese (BP) and Finnish, and Greek, a full pro-drop language. A comparison with a full pro-drop language will show that the behavior of locatives in partial pro-drop languages is one further characteristic that groups together in opposition to pro-drop ones, apart from the more constrained distribution of pro. We will be concerned with some structures that contain an overt locative in all three languages, either interpreted as impersonals (null impersonals) or not. We will first compare BP to Finnish, and show that while locatives lack an argumental status and simply satisfy the EPP in*

*Finnish as pure expletives, this is not the case in BP. In this language, locatives can both be argumental and expletive-like. By contrast, in Greek, locatives never check the EPP, i.e. they are never expletive-like. Rather they are referential/deictic elements, which perform a function similar to what has been discussed for English locative inversion.*

## 1. Introduction<sup>1</sup>

Locatives have received a considerable amount of attention within generative grammar over the decades. Unlike other circumstantial PPs, it has been shown that these elements have grammatical functions in several languages and constructions. For example, Stowell (1981) noticed that PPs in locative inversion behave as subjects with respect to some tests but not others (see Rizzi and Shlonski 2007 for a reinterpretation of the data). Freeze (1992) claimed that predicative locative sentences (*The book is on the bench*) and existential sentences (*there is a book on the bench*) are the byproduct of a same underlying structure in which a locative is one of the selected arguments of a complete functional complex, a head that selects both an argument and a specifier (Chomsky 1985). Recently, Kayne (2008) argued that expletive *there* in English is a deictic modifier of the associate, merging low in the structure. Richards (2007), Deal (2009), and Alexiadou & Schäfer (2011) reached a similar conclusion independently.

In this paper, we explore the role of locatives in Brazilian Portuguese (BP), Finnish and Greek. By studying these three languages, we provide evidence that the role taken by locatives in different languages is tied to the properties of T in the respective languages. In both BP and Finnish, locatives can satisfy the EPP. However, in BP, locatives behave as arguments in null impersonals, a fact that has not been noticed until now. Greek is very different from these two languages in not using locatives to satisfy EPP. We relate this to the full pro-drop nature of this language. Full pro-drop languages satisfy

---

<sup>1</sup> Abbreviations used in this article follow the Leipzig Glossing Rules' instructions for word-by-word transcription, available at: <https://www.eva.mpg.de/lingua/pdf/Glossing-Rules.pdf>.

EPP through V-raising (Alexiadou & Anagnostopoulou 1998) and locatives are associated with the CP domain.

The paper is organized as follows. In section 2, we discuss the status of 3<sup>rd</sup> person in partial pro-drop languages. As in other partial pro-drop languages, in BP and Finnish, 3<sup>rd</sup> definite subject pronouns can be null in embedded clauses, but not in root clauses. In impersonal sentences, however, 3<sup>rd</sup> generic subject can be null (cf. Holmberg 2005, Holmberg, Nayudu and Sheehan 2009, henceforth HNS, Holmberg 2010 and Holmberg & Phimsawat 2015; for analyses of BP data, see, e.g., Cavalcante, 2007; Galves 2001; Figueiredo-Silva 1995; Kato 1999; Duarte, 1995; Nunes, 1990; among many others.) In section 3, we compare Finnish and BP null impersonals, showing that a generic null pronoun is present in the former language but not in the latter.

In order to understand the differences between null impersonals in the two languages, in section 4 we deal with the distribution of locatives in these languages. The comparison shows that while locatives are only licensed if T is specified for either generic or definite 3<sup>rd</sup> person in BP, they behave as pure expletives in Finnish, being licensed whenever EPP has to be satisfied. In section 5, we briefly turn to Greek and show that locatives in this language share properties with English locative alternation. Section 6 ties the properties illustrated throughout the paper to properties of T in these three languages. Section 7 concludes the paper.

## **2. Third person in partial pro-drop languages**

As in other partial pro-drop-languages, Finnish and Brazilian Portuguese 3<sup>rd</sup> definite subject pronouns cannot be null in root clauses, as shown in (1) and (2), whereas 3<sup>rd</sup> impersonal pronouns can be null, cf. (3) and (4).

- (1) Finnish (Holmberg 2005: 539)  
 \*(Hän) puhuu englantia  
 (s/he) speak:3 English:PAR  
 "S/he speaks English."
- (2) BP<sup>2</sup> (personal knowledge)  
 \*(Ele) fala inglês.  
 (he) speak:3 English:PAR  
 "He speaks English."
- (3) Finnish (Holmberg 2005:548)  
 Tässä istuu mukavasti.  
 Here sit:3 comfortably  
 "One can sit comfortably here."
- (4) BP (personal knowledge)  
 Aqui vende camisa.  
 Here sell:3 shirt.  
 "T-shirts are sold here."

However, 3<sup>rd</sup> definite subject pronouns can be null in embedded clauses, if there is no topic or locative PP intervening between the null subject and the root clause, see (5). (6) shows that BP follows the same pattern.

- (5) Finnish Holmberg (2005:539)  
 Pekka<sub>i</sub> väittää [että hän<sub>i/j/</sub> Ø<sub>i/\*j</sub> puhuu englantia hyvin]  
 DP claim:3 that he/Ø speak:3 English well.

---

<sup>2</sup> Unless otherwise stated, BP examples are from the second author.

- (6) BP (personal knowledge)  
 João afirma que ele<sub>i/j</sub>/ Ø<sub>i/\*j</sub> fala inglês bem.  
 DP claims that he/Ø speak:3 English well.  
 “John claims that he speaks English well.”

If a locative PP is fronted, the null subject in the embedded clause can only be interpreted as an impersonal sentence, having a generic subject, both in BP, example (7), and Finnish, example (8).

- (7) BP (personal knowledge)  
 João afirma que no Brasil fala inglês muito bem.  
 John claim:3 that in.the Brazil speak:3 English very well.  
 “John claims that in Brazil people speak English very well.”
- (8) Finnish (HNS 2009: 73)  
 Jari sanoo että tässä istuu mukavasti.  
 Jari say:3 that here sit:3 comfortably.  
 ‘Jari says that one can sit comfortably here.’

Although there is no overt generic pronoun in the embedded clauses in the sentences (7) and (8), one can entertain the hypothesis that a generic pronoun is present in these sentences. Indeed, as Holmberg (2005, 2010) argues in detail, a covert generic pronoun must be present in Finnish. In the next section, we draw a quick comparison between Finnish and BP null impersonals in order to investigate whether BP null impersonals also features a generic null pronoun.

### 3. Null impersonals in BP and Finnish

A first piece of evidence for the presence of a generic pronoun in Finnish null impersonals is that such pronoun can function as an antecedent for an anaphor.<sup>3</sup>

- (9) Finnish (Holmberg 2005:550)  
 Nyt täytyy pestä autonsa.  
 Now must wash:3 car:POSS;RFL  
 ‘One must wash one’s car now.’

Moreover, the object is assigned accusative Case, even though there is no other overt DP, see ((10)).<sup>4</sup>

- (10) Finnish (Holmberg 2005:549)  
 Täällä voi ostaa auton/\*auto.  
 Here can:3 buy car:ACC /car:NOM  
 ‘You can buy a car here.’

Subject-oriented adverbials and purpose clauses are licensed, as shown in (11) and (12).

- (11) Finnish (Holmberg 2005:548)  
 Tässä istuu mukavasti.  
 Here sit:3 comfortably  
 ‘One can sit comfortably here.’

---

<sup>3</sup> An anonymous reviewer, a native speaker of Finnish, informs us that this sentence is not completely natural. According to the reviewer an overt subject should be used, e.g.: Nyt jokaisen [each-one-GEN] täytyy pestä autonsa ‘Now everyone must wash their cars’ or leave the possessive suffix out: Nyt täytyy pestä auto ‘Now it is necessary to wash the/a car.’

The reviewer comments that: “ it may be that the reason has something to do with the fact that the subject of täytyy is lexically case marked with genitive. The same goes for other modals with a genitive subject täytyy, pitää, kuuluu, all meaning ‘must’ The permissive modal verbs ‘may’(saa, voi) have a nominative subject and they work much better in this context.”

<sup>4</sup> As Holmberg (2005) points out, in some modal constructions, the subject is assigned genitive Case and the object, nominative Case. Only with these verbs the object can have nominative Case in null impersonals.

- (12) Finnish (Holmberg 2010:205)  
 Tänne tulee mielellään [PRO ostamaan keramiikkaa].  
 here come:3 PRO with.pleasure buy.INF pottery  
 ‘It is nice to come here to buy pottery.’

However, even though this analysis has been extended to other partial pro-drop languages, it does not seem to work for the canonical BP null impersonal data examined in the literature, i.e. null impersonals with generic time reference.<sup>5</sup> First, as shown in ((13)), anaphors are not licensed in BP null impersonals.<sup>6</sup>

- (13) Brazilian Portuguese (personal knowledge)  
 \*Aqui ensina a si mesmo.  
 Here teach:3to se:OBL self.  
 ‘Here one teaches oneself.’

Also, null impersonals in BP do not license inalienable possessors, which require a human antecedent in Romance. In (14), we observe that an inalienable body part ‘*a mão*’ is interpreted as possessed if c-commanded by a human antecedent. Both a definite DP (*João*) and the impersonal morphology (*se*) warrants this interpretation if they c-command an inalienable body part.

- (14) BP (personal knowledge)  
 João/se levantou a mão na sala para fazer pergunta.  
 John/one raised:3 the hand in.the classroom to ask:INF question.  
 ‘John/one raised his hand to ask questions in the class.’

In ((15)), however, this reading does not obtain as no human DP c-

---

<sup>5</sup> For some comments on other types, see footnote 10 and section 6.2.

<sup>6</sup> As Charlotte Galves (p.c) points out, the test in (9) is not replicable in BP, since *seu*, the former possessive generic/3<sup>rd</sup> pronoun, is nowadays an almost exclusive 2<sup>nd</sup> definite possessive pronoun, due to changes in the pronominal paradigm. Hence, a version of (0) into BP leads to the interpretation that a generic entity will wash a car possessed by a definite person.

(9’) Agora pode lavar seu carro.  
 Now can:3 wash:INF your<sub>def</sub> car.



commands the inalienable body part.

- (15) BP (personal knowledge)  
 ??Na sala de aula levanta a mão para fazer pergunta.<sup>7</sup>  
 In.the classroom raise:3 the hand to make:INF question.  
 ‘In classrooms, one raises his hand to ask questions.’

Furthermore, subject-oriented adverbials such as *com maestria*/ *Com atenção* are not licensed, as we see in (16).

- (16) BP (personal knowledge)  
 \*Naquela escola de culinária prepara doce  
 In.that school of culinary prepare:3 sweet  
 com maestria/com atenção.  
 with mastery/with attention.  
 ‘One prepares sweets with mastery/with attention in that culinary school.’

((17)) shows that purpose clauses are also generally not licensed.<sup>8</sup>

- (17) BP (personal knowledge)  
 \*Naquela escola de culinária prepara doce  
 In.that school of culinary prepare:3 sweet  
 para alimentar criança.  
 to feed:INF child.

---

<sup>7</sup> Three of four speakers judged this sentence as ungrammatical. One speaker judged it as grammatical under a contrastive reading, something along the lines of: ‘In the classroom, one raises his hand to ask questions, not to argue with the teacher.’ Crucially, under a neutral reading, this sentence is not grammatical for any of our consultants.

<sup>8</sup> Charlotte Galves (p.c.) offers as a counterexample the sentence in (i):

- i. No Brasil só trabalha pra ganhar dinheiro.  
 In.the Brazil only work:3 to earn money.  
 ‘In Brazil one only works to earn money.’

This sentence is indeed grammatical to the second author of this paper and other speakers consulted. However, without the contrastive/emphatic adverb *só*, the judgments are not so sharp. As the discussion in footnote 5 suggests, contrastive contexts improve the grammaticality of the relevant sentences.

‘One prepares sweets to feed the children in that culinary school.’

Given these contrasts, it seems that we cannot maintain Holmberg’s analysis for BP, while arguably this captures very nicely the Finnish data. The question that arises then is: what ensures the impersonal reading of these sentences in BP?

Before we offer an answer to this question, note that null impersonal sentences in BP are subject to a number of constraints, which further support our conclusion that they differ from their Finnish counterparts. As shown in (18), unaccusative verbs are out in BP null impersonals. In addition, BP null impersonals do not tolerate other circumstantial PPs: a generic reading for the subject is possible only in the presence of a locative element.<sup>9</sup>

- (18) BP (personal knowledge)  
 \*Naquele hospital nasce com saúde.  
 In.that hospital born:3 with healthy.  
 Intended: One who is born in that hospital is healthy.

By contrast, these constraints are not found in Finnish. Unaccusative verbs appear in null impersonals and a generic null subject is generally available, no matter what element satisfies EPP. For example, in (19), the expletive *sitä* satisfies EPP.<sup>10</sup>

- (19) Finnish (Roberts 2015)  
 Sitä huolestuu helposti.  
 EXPL get.worried easily  
 ‘One gets worried easily.’

---

<sup>9</sup> The only apparent counterexample to this generalization is *hoje em dia* ‘nowadays’, as in the sentence *Hoje em dia usa saia* (lit. Nowadays wear:3 skirt), discussed in Galves (2001). As this is the only temporal element licensed in BP null impersonals, it cannot be said that temporal as locative PPs satisfy EPP in BP null impersonals.

<sup>10</sup> As BP does not have lexical expletives, (20) has the sole purpose to illustrate that this reading is not dependent on locatives in Finnish, but it is in BP.

(20) exemplifies a further constraint in BP null impersonals. Individual-level verbs do not form null impersonals in BP, but they do in Finnish, as (21) indicates.<sup>11</sup>

- (20) BP (personal knowledge)  
 \*Naquela casa teme a morte.  
 In.that house fear:3 the death.  
 Intended: One fears the death in that house.

- (21) Finnish (Roberts 2015)  
 Sitä ei tiedä milloin kuolee.  
 EXPL not know:3 when die:3  
 “One doesn’t when one dies.”

Table 1 highlights the differences between BP and Finnish null impersonals.

Test	Finnish	BP
Anaphors	YES	NO
Subject-oriented adverbials	YES	NO
Purpose clauses	YES	NO
Unaccusative verbs	YES	NO
Individual-level verbs	YES	NO

**Table 1: differences between Finnish and BP null impersonals**

To summarize, we have presented evidence that i) BP null impersonals do not pass any of the tests for the presence of an implicit agent in their structure; ii) only a subset of transitive stage-level verbs

<sup>11</sup> One reviewer argues that the psych verb *temer* in (20) may fall under the same generalization proposed for examples (18) and (19), since psych verbs are usually analyzed as unaccusatives. Note, however, that *temer* (fear) is usually taken to represent the class of transitive psych verbs in which the experiencer is a ‘deep subject’, hence it is analyzed as a transitive sentence (Belletti & Rizzi 1988).

is allowed in BP null impersonals. More precisely, the verb at hand must include an agentive external argument in transitive sentences.

While we recognize that the licensing of a subset of transitive stage-level verbs is not a conclusive piece of evidence for arguing for a drastic differentiation of Finnish and BP data, the fact that BP null impersonals do not pass any of the tests for the presence of an implicit argument is quite suggestive of the difference between null impersonals in these two languages.<sup>12</sup>

Recall our question above: what ensures the impersonal reading of the BP examples? We propose that it is the locative element that is responsible for this. Crucially, the locative element in the above sentences then cannot be analyzed as a topic (contra Barbosa 2011, to appear) or a pure expletive satisfying the EPP (contra Buthers 2010, Avelar & Cyrino 2008) as the tests from (13) to (17) show that a pronoun is not responsible for the human reading in BP null impersonals. Specifically, we propose that, at least for BP, the locative is the element responsible for deriving the existential interpretation. This proposal is reminiscent of Freeze's (1992) idea that, in several languages, a locative is a subject that generates existential meanings in existential sentences. Likewise, Brody (2013) notes the crucial role of locatives in generating generic readings with personal pronouns. According to this author, locatives have a silent **semantic** person that do not enter into syntactic operations, but contribute to the semantic interpretation of some sentences. In order to demonstrate this, consider the contrast between (22) and (22b). Whereas (22) can have an impersonal reading, meaning that people in general like to take a nap in the afternoon when in Italy, (22b) cannot. In other words, as the locative is absent, (22b) can only mean that a definite group of people like to take a nap in the afternoon.

---

<sup>12</sup> A reviewer reminded us of the two classes of impersonals in Italian discussed in Cinque (1988). In tensed contexts, several types of verbal classes are licensed (transitives, unergatives, unaccusatives, copulas, and the like). In untensed contexts, however, transitive and unergative verbs are the only ones licensed in some constructions. The reviewer then suggests that BP null impersonals can be a silent counterpart of untensed Italian *se*-impersonals. If this were the case, we should be able to detect the presence of this silent pronoun. The tests from (13) to (17), however, show that BP null impersonals lack an element responsible to license agentive-like elements.

(22) English (Brody 2013:34-35)

- a. In Italy they like to take a nap in the afternoon.
- b. They like to take a nap in the afternoon.

As we have been arguing that a pronoun is absent in BP null impersonals and it is usually assumed that locatives can generate a generic reading, we claim that locative is the external argument in these sentences. Under this analysis, we can explain some of the characteristics of BP null impersonals witnessed above, namely: the verbal restriction and the behavior in respect to agentive tests.

Recall that neither individual-level nor unaccusative verbs form null impersonals in BP. Individual-level verbs are argued to lack the event argument, a spatiotemporal argument above vP responsible for, among other things, the licensing of locatives in stage-level but not individual-level verbs (Kratzer 1995[1989]). In addition, the impossibility of forming BP null impersonals with unaccusative stage-level verbs is quite revealing. Note that nothing would forbid the licensing of unaccusative stage-level verbs in BP null impersonals if the locative in this construction were a mere adjunct. As transitive stage-level verbs, unaccusative stage-level verbs like *nascere* (born), in (18), are endowed with an event argument. However, as noted, the reason why this class of verbs is not licensed in BP null impersonals is that this locative can only be in complementary distribution with an argument that is merged on the same region the locative is: above vP.

Finally, concerning the behavior of BP null impersonals in respect to agentive tests, they corroborate an analysis of locatives as having a silent semantic, but not syntactic, person. The opposite behavior of Finnish in respect to verbal classes licensed and the agentive tests makes it clear that in this language a null pronoun must be present, as argued extensively in Holmberg's work.<sup>13</sup>

---

<sup>13</sup> Anders Holmberg (p.c) observes that the theta-criterion has to be abandoned if this analysis for BP null impersonals is right. Although we will not fully develop this idea here, we believe that a constructionist view for argument structure is the adequate one to explain these facts. Under the view that the argument structure is syntax and, therefore, depends on the specific formatives a language has, theta-criterion is nothing but an epiphenomenon.

Finally, adopting the idea that several elements besides verbs have external arguments, including prepositions (Svenonius 2010), Wood & Marantz (2015) argue for the existence of a single argument introducer *i*\*, which will be interpreted

If the analysis for BP null impersonals is on the right track, we may be able to detect a specific characteristic of BP syntax that allow an external argument to be a locative in these contexts. We turn to this question in the next section.

## **4. Locatives as arguments and expletives**

---

differently depending on the projection it merges with. This proposal can successfully derive the agentive interpretation in BP null impersonals if we assume that  $i^*$  can s-select for a PP when merging with a vP in this language. Hence, null impersonals in BP would have a quirky subject. For more details, see Carvalho (2016).

Given the contrasts seen in the above section, we can say that locatives have an expletive function when their only purpose is to satisfy the EPP in restricted environments, and are arguments when they yield generic meaning in null impersonals in BP. In Finnish, on the other hand, locatives only satisfy the EPP, as pure expletives (Holmberg & Nikanne 2002). In what follows, we provide evidence for this view by showing that in several 3<sup>rd</sup> person contexts locatives satisfy the EPP in BP. By contrast, in Finnish, they can remerge to Spec of TP whenever necessary, i.e. there is no constraint regarding the specification of T in this language for the satisfaction of the EPP by locatives.

## 4.1 Locatives in BP grammar

The order VS in BP is degraded (cf. Berlinck 1988 for its loss throughout the centuries). This is a possible order, however, if either locative or temporal elements are fronted. If the temporal or locative element is overt, even unergative verbs can be licensed in VS order (cf. Avelar & Cyrino 2008; Avelar 2009; Avelar & Galves 2011).

- (23) BP (personal knowledge)  
 Na semana passada entrou um cara na minha casa.  
 In.the week last enter:PST.3 a man in.the my house  
 ‘Last week a man (= a thief) entered my house.’

If the locative or temporal element is covert, the interpretation is more constrained. In (24), the only possible interpretation is that the event happened recently, most likely at the same day. See Pilatti (2006) and Pilati & Naves (2013).

- (24) BP (personal knowledge)  
 Morre Maria da Silva.  
 Die.PRS:3 Maria da Silva.  
 ‘Maria da Silva died today.’

Consequently, sentence (25), in which an event that took place some years ago is described, is odd.

- (25) BP (personal knowledge)  
 Você lembra o que aconteceu há 10 anos?  
 You remember:2 the what happened there.is 10 years?  
 \*Morreu a Maria da Silva.  
 \*Died:3 the Maria of.the Silva.  
 ‘Do you remember what happened 10 years ago? Maria da Silva died.’

With unaccusative verbs, locatives can be non-canonical subjects (Pontes 1987; Galves 2001 ; Lunguinho 2006; Rodrigues 2010, among many others), as in the possessor raising data below shows.<sup>14</sup>

- (26) BP (personal knowledge)  
 Cabe muita camisa nessas gavetas.  
 Fit:3 a.lot T-shirt in.these drawers.
- (27) BP (personal knowledge)  
 [Essas gavetas] cabem muita camisa.  
 These drawers fit:3 a.lot T-shirt.  
 ‘It fits a lot of things in these drawers.’

A characteristic that unifies all these phenomena is the fact that these locative strategies are fruitful only with 3rd person. Consider, for example, a version of (23) with a 1<sup>st</sup> person subject. In a neutral context, locatives satisfying the EPP in BP are ungrammatical if T bears 1st or 2<sup>nd</sup> person features.

- (28) BP (personal knowledge)  
 \*Na semana passada entrei eu na minha casa nova.  
 In.the week last enter:PST.1 I in.the my house new.

---

<sup>14</sup> Nunes (2015) shows that the the object is assigned inherent Case in possessor raising constructions.



‘I entered my new house last week’.

Even though there is a restriction regarding the grammatical person, locative elements in BP can be said to satisfy EPP in VS constructions, for example. Observe, however, that this does not seem to be the case in either null impersonals or in possessor raising constructions. For null impersonals, we have demonstrated that the locative PP is in complementary distribution with an agentive external argument (cf. (18) and (20)). In possessor raising cases, exemplified in (27), the assignment of nominative Case to the locative is poorly understood, but cannot be solely attributed to a means of satisfying the EPP. A more canonical option would be moving the entire DP rather than a part of it.

In Finnish, locatives seem to play a different role. They are, as Holmberg (2005) points out, pure expletives. Hence, they do not occupy Spec,TP only in 3<sup>rd</sup> person contexts but whenever EPP needs to be satisfied. (29) shows that a locative is satisfying the EPP in a context where T is specified for 1<sup>st</sup> person. We come back to this issue in section 6.2.

- (29) Finnish (Holmberg 2005:547)  
 Pariisissa minä olen käynyt (mitten Roomassa).  
 Paris:INE I be:1 visited but.not Rome:INE  
 ‘I’ve been to PARIS (but not Rome)’

Therefore, our original question of why locatives play a central role in BP null impersonals, but not in Finnish, seems to be related to the crucial role of locatives in different types of 3<sup>rd</sup> person constructions in the first grammar, but not in the second. This question will be discussed in section 6.

## 5. Greek locatives

Contrasting with Finnish and BP, in pro-drop languages locatives only have a discourse function, i.e. they do not satisfy the EPP of this type

of language. In Greek, VS orders are generally acceptable with all sorts of subjects, definite, indefinite, all persons, as well as bare plurals. It has, however, been noted in the literature, that VS orders are degraded with unergative predicates. However, as in other pro-drop languages, in Greek, VS orders with certain unergative predicates become acceptable when a locative adverbial is added to the sentence (Torrego 1989, Rigau 1997, Borer 2005, Alexiadou 2010):

- (30) Greek (personal knowledge)  
**edo** pezun pedja  
 here play:3 child:PL  
 ‘Children play here.’

Alexiadou (2010) shows that this type of inversion is mainly possible with certain unergative predicates and a sub-class of unaccusatives. This is very different from Finnish, where locatives remerge to spec of TP regardless of the type of verb, showing, again, the different role of locatives in these two grammars.

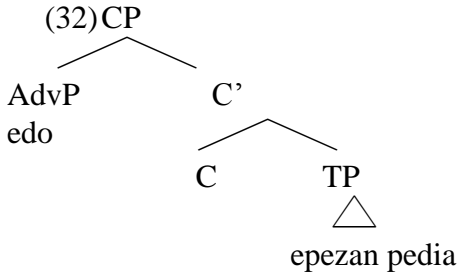
Alexiadou (2010) argues in detail that the locative does not occupy the Spec,TP position, and that the single DP argument is the external argument of the predicate. For instance, in (31), Alexiadou’s (22), we see that the predicate retains its agentive characteristics: it is compatible with agentive/instrumental adverbials just like any other unergative predicate.

- (31) Greek  
 edo epezan pedia prosektika/me ti hrisi bala/epitides  
 here played:3 child:PL carefully/with the golden ball/on purpose  
 “Children play here carefully/with the golden ball/on purpose”

Instead, Alexiadou (2010) adopts an analysis, according to which the locative is a *stage topic* in Cohen & Erteschik-Shir’s (2002) terms. It is situated in the CP domain, the area in the clause structure that is responsible for discourse features (see Rizzi 1997). The presence of a locative in the CP area leads to a focus interpretation of the elements following it. Thus full pro-drop languages lack expletive locatives. We will maintain that for these languages V-raising always satisfies the EPP, and no XP is required to appear in TP for EPP reasons, as

has been argued for in great detail by Alexiadou & Anagnostopoulou (1998).

Below, we offer a syntactic structure for a sentence like (30) in Greek. This structure will be compared with BP and Finnish later on.



## 6. Towards an analysis

### 6.1 The D feature

In Holmberg's (2005) and HNS's (2009) analysis, a crucial difference between pro-drop and partial-pro-drop languages is the feature D in T.<sup>15</sup> D stands for definiteness and its presence in the former group of languages, but not in the latter, accounts for the possibility of having null definite subjects only in pro-drop languages.

In the two aforementioned analyses, both definite and indefinite 3<sup>rd</sup> person are treated as instances of the same category. Both start out the derivation as phi-pronouns, pronouns smaller than DPs, having only phi-features as their constituents. It is a  $\phi$ -pronoun, following Déchaine & Wiltschko's 2002 typology. After entering into the derivation, the  $\phi$ P pronoun merges as an external argument at some point. The phi-features in T then agree with the bunch of phi-features merged as external argument. Observe, however, that T, besides also having a bunch of phi-features, corresponding to the verbal morphology, has the feature D in contexts in which the interpretation of the subject is definite (3<sup>rd</sup> referential person, for example) and information about the time of the utterance, as represented in (33).

<sup>15</sup> The feature D in T is inherently specified in Holmberg (2005), but uninterpretable in HNS (2009). In the latter account, D in pro-drop languages is valued by an A-topic in the C domain and, in its turn, value the external argument.

The features in T are then a superset of the features merged as an external argument. Therefore, by means of chain reduction, the features in T will end up being the ones pronounced, i.e. the lower chain will be deleted (35). See the steps of the derivation below, from HNS 2009: 70.

- (33) case of external argument to be valued  
[T, D<sub>k</sub>, uφ, NOM] [vP [3sg, uCase] v...]
- (34) case of external argument is valued  
[T, D<sub>k</sub>, uφ, NOM] [vP [3sg, NOM] v...]
- (35) chain reduction  
[T, D<sub>k</sub>, uφ, NOM] [vP [~~3sg~~, ~~NOM~~] v...]

In partial pro-drop languages, by contrast, the D feature is not present since definite subjects are not null. Nonetheless, recall that 3<sup>rd</sup> definite person can be null in both languages if they are the subject of an embedded clause. See examples (5) and (6) from both languages repeated below as (36) and (37).

- (36) Finnish Holmberg (2005:539)  
Pekka<sub>i</sub> väittää [että hän<sub>i/j</sub>/ Ø<sub>i/\*j</sub> puhuu englantia hyvin]  
DP claim:3 that he/Ø speak:3 English
- (37) BP (personal knowledge)  
João afirma que ele<sub>i/j</sub>/ Ø<sub>i/\*j</sub> fala inglês bem.  
DP claim:3 that he/Ø speak:3 English well.  
'John claims that he speaks English well.'

HNS point out that an alternative derivation must be responsible for the licensing of 3<sup>rd</sup> person embedded subject in this specific context. Following Holmberg's (2005) analysis, the idea is that the 3<sup>rd</sup> person definite subject checks EPP, because this reading is only available if there is no intervening element between the subject of the embedded clause and the next clause up, as (38) from Finnish and (39) from BP exemplify.

- (38) Finnish (HNS 2009: 73)  
Jari sanoo että (hän) istuu mukavasti tässä.  
Jari say:3 that (he) sit:3 comfortably here.

‘Jari says that he sits comfortably here.’

- (39) BP (Rodrigues 2004:142)  
 João<sub>1</sub> me contou que (ele<sub>1</sub>) vende cachorro quente  
 João<sub>1</sub> me told:PAST.3 that (he<sub>1</sub>) sell:3 hot dog  
 na praia.  
 in.the beach.  
 ‘João told me that he sells hot dogs at the beach.’

If an adverb checks the EPP, for example, the generic reading arises (40) for Finnish and (41) for BP).

- (40) Finnish (HNS 2009: 73)  
 Jari sanoo että tässä istuu mukavasti.  
 Jari says that here sit:3 comfortably.  
 ‘Jari says that one can sit comfortably here.’
- (41) BP (Rodrigues 2004:142)  
 João me contou que na praia vende cachorro quente.  
 João me told that in.the beach sell:3 dog hot.  
 ‘João told me that hot dogs are sold at the beach.’

The generalization then is that subjects can have a definite interpretation only if the subject of the embedded clause is c-commanded by the subject of the matrix clause, whereas the generic reading arises if another constituent, either a PP in both Finnish and BP or the object in Finnish, are situated in Spec, TP. The generic reading is thus obtained if the bunch of phi-features stay remain inside the vP.

In BP, however, we have seen that locatives seem to be responsible for the generation of an impersonal sentence rather than a covert pronoun. Hence, although *tässä* (here), in (40), and *na praia* (at the beach), in (41), satisfy the EPP and preclude the subject of the root clause to control the subject of the embedded one, these two locative elements differ in the sense that *tässä* is non-argumental and *na praia* is argumental. Positing this difference between BP and Finnish null impersonals leads us to consider how the valuation of features between T and the element in the external argument position will take place. If a locative merges as external argument in BP null

impersonals, the derivation should crash since PP locatives do not have syntactic person features, as the BP data have shown. Alternatively, it could be the case that there are other features on T in BP null impersonals and the use of locatives as arguments reflect this. We explore this possibility in section 6.2.

## 6.2 Another type of INFL in BP

Following Ritter & Wiltschko (2014), we assume that in BP locatives anchor the event. In BP, referential T can have a defective set of phi-features (cf. Ferreira 2000; Nunes 2008; Cyrino 2010, among others). Thus, it can be the case that T is devoided of phi-features in BP null impersonals. Null impersonals in this language, we claim, are cases in which INFL is specified for location, hence the mandatory presence of a locative, rather than tense. The examples below show the differences on the interpretation when the locatives are present or not. Crucially, whenever T is episodic, locatives are dispensable. In contrast, under a generic tense, they are obligatory in BP null impersonals. In other words, we propose that INFL has a location specification in BP when T would have default specification (3<sup>rd</sup> person, generic tense).

Ritter & Wiltschko (2014) claim that two different INFL values cannot coexist as distinctive. As BP null impersonals exemplified above are awkward or entirely out if T is [+past], it seems that location and specified time cannot coexist in BP INFL.

- (42) BP (personal knowledge)  
 \*Aqui vendeu camisa.  
 Here sell:PAST.3 T-shirt.  
 ‘One sold T-shirts here.’
- (43) BP (personal knowledge)  
 ?\*Na escola de culinária preparou doce.  
 In.the school of culinary prepare:PAST.3 sweet.  
 ‘At the culinary school someone prepared sweets.’

Interestingly, as pointed out by Rozana Naves (c.p) and Charlotte Galves (c.p), these sentences improve if expressions such as *por muito tempo* (for a long period of time) or *já* (once) are added. (42) becomes

grammatical with the addition of these elements.

- (44) BP (personal knowledge)  
 Aqui já/ por muito tempo vendeu camisa.  
 Here once/for much time sell:PAST.3 T-shirt.  
 ‘One sold T-shirts here for a long period of time/once.’

Observe, however, that an episodic reading for these sentences is not available. They are generic events that stretched for a period of time in the past.

In cases in which a true episodic reading is available, null impersonals are possible, but locatives are not fronted, i.e. they do not have the same role in sentences in which T is not specified. (45) is marginal if the locative *no show de Zezé di Camargo* is fronted, and (47) is out if *aí* is fronted. These sentences improve if the locative is not fronted, as examples (46) and (48), from Lunguinho & Medeiros Junior (2006), indicate.

- (45) BP (personal knowledge)  
 ?\***No show do Zezé di Camargo** matou um rapaz.
- (46) BP (Lunguinho & Medeiros Junior 2006:16 )  
 Matou um rapaz **no show do Zezé di Camargo**  
 Killed:PST.3 a guy in.the show of.the Zezé di Camargo  
 e Luciano ontem.  
 e Luciano yesterday.  
 ‘A guy was killed at Zezé di Camargo e Luciano’s show yesterday.’
- (47) BP (personal knowledge)  
 \***Aí** telefonou da CEB pra você.
- (48) BP (Lunguinho & Medeiros Junior 2006:16 )  
 Telefonou **aí** da CEB pra você.  
 Telephone:PST.3 there of.the CEB to you.  
 ‘Someone from CEB called you.’

Furthermore, some contrasts found by Holmberg & Phimsawat (2015)

between radical pro-drop languages and Finnish null impersonals are replicable in BP. The authors noticed that the alleged null pronoun in languages like Mandarin and Thai can refer to either human or non-human beings if the predicate allows it. Consider example (49) that demonstrates this possibility in Thai.

- (49) Thai 'Holmberg & Phimsawat (2015:61)  
 Rúguo néng huò dé gèng duo de yǐng yǎng, nà me  
 if can get of more of nutrition, (that)  
 huì zhǎng de gèng kuài  
 (will) grow of more fast.  
 'If one gets a lot of nutrition, one will grow fast.

The same interpretation is available for the translation of (49) into BP: *Se pode ter mais nutrição, vai crescer mais rápido*. The null element in both clauses can refer to either plants or humans. Holmberg & Phimsawat (2015) argue that, in the languages in which both interpretations are available, the null pronoun has a referential index – rather than a human feature - that is bound by a generic feature located in C. In languages in which T has phi-features, the null pronoun has a human feature, besides a referential index. This warrants that only a human interpretation will be available and that T must enter into an agree relation with the null pronoun, otherwise the derivation clashes.

Abstracting away from the details of Holmberg & Phimsawat's (2015) analysis, the possibility of having a non-human reading in BP for sentence (49) is intriguing, especially taking into consideration that null impersonals in BP have an INFL specified for location rather than tense, as we have been arguing. Observe, however, that this reading arises when a subordinate clause is present. Subordinate clauses have operators whose primary function is the temporal binding of the sentence (Guéron 1983). Therefore, we can couple (49) with (45) and (47). In these three cases, temporality is involved and a locative, if present, is not INFL related.

In addition, note that an unaccusative verb, *grow* in (49), can be used when temporality is involved, showing, once more, that null impersonals with fronted PP locatives and the cases in which there is a temporal interval and this reading is obtained, are different derivations. Remember that unaccusative verbs cannot form null impersonals in BP when locatives are fronted (cf. Table 1). Given the

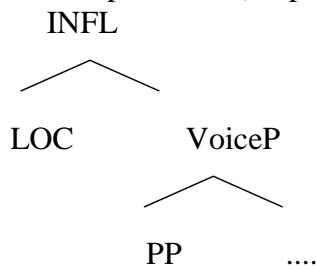


differences, we believe that the reading of a generic entity in (46), (48) and the BP counterpart of (49) is obtained by operator-binding in BP, which explains two factors: i) as long as the verb allows it, the reading of a human entity is not the only one available; ii) unaccusative verbs are licensed. When locatives are related to INFL, by contrast, unaccusative verbs are out, because the locative is a scene-setting modifier that will merge above the vP, as an external argument, and a semantic human reading is the only one that this element can contribute.

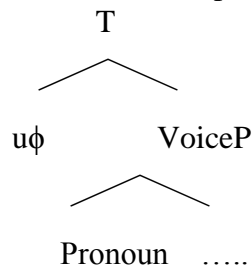
To summarize, we have seen that other types of null impersonals in BP depend on the specification of tense. BP null impersonals with generic reference need a locative as an external argument because the specification of INFL in this type of data is location rather than tense. This explains the characteristics of BP null impersonals we have witnessed throughout the discussion.

At this point, we can present two derivations for BP and Finnish null impersonals.

(50) BP null impersonals (3<sup>rd</sup> person, generic tense)



(51) Finnish null impersonals



## 7. Conclusion

We have compared the role of locatives in Finnish, BP, two partial pro-drop languages, and Greek, a pro-drop language. The use of locatives in Finnish and BP, despite sharing a substantial number of properties, do not overlap. One of the crucial differences is the role of locatives in null impersonals. In BP, these elements behave as arguments, whereas in Finnish they are expletive-like elements. The reason why null impersonals in BP and Finnish seem so alike, yet are so differently in terms of constituency can be explained in terms of the INFL each language has. BP can specify 3<sup>rd</sup> non-referential person with a locative feature in INFL, hence locatives can be arguments and expletives in this language. In Finnish, locatives satisfy EPP, i.e. are pure expletives, as T bears no specification for location regardless of time or person specification.

Importantly, the difference between null impersonals in the two languages shows that partial pro-drop languages cannot be thought as a coherent group. These languages share some properties, such as the behavior of 3<sup>rd</sup> person, as discussed in section 2, but they seem to have chosen different ways of becoming non-pro-drop languages. In particular, BP has chosen a different value to INFL in 3<sup>rd</sup> non-referential contexts. Even when INFL is specified for time, as seen in (46) and (48), no phi-features seem to be present and operator-binding generates the generic reading for an argument. Finnish, on the other hand, employs tense in null impersonals and locatives only satisfy EPP. In Greek, a full pro-drop language, none of these options is available, V-raising being the main way to satisfy the EPP. The differences among the three languages are summarized in Table 2.

Function/Language	Greek	Finnish	BP
<b>Function</b>	Focusing adverb	EPP	EPP, argument
<b>Nodes to which locatives are associated with in the language</b>	vP adjunct - CP	vP adjunct – TP	vP adjunct, TP; External argument, TP

**Table 2: Summary of the properties of locatives in the three languages**

## Acknowledgements

We are indebted to the comments of two anonymous reviewers that greatly improved the readability of this paper. Many thanks to Anders Holmberg for discussions and for being a constant source of inspiration through the years. The authors would also like to acknowledge the support received from the DFG (grant AL 554/8) awarded to the first author and CNPq (grant #142048/2012-7 and #229746/2013-6) awarded to the second author.

## Abbreviations

OBL	Oblique
PART	partitive

**Table 3: List of abbreviations**

## 9. References

- Alexiadou, Artemis & Anagnostopoulou, Elena. 1998. Parametrizing AGR: Word order, V-movement and EPP-checking. *Natural Language & Linguistic Theory* 16. 491-539.
- Alexiadou, Artemis & Schäfer, Florian. 2011. An unaccusativity diagnostic at the Syntax-Semantics interface: there-insertion, indefinites and restitutive again. In Reich, Ingo, Horsch, Eva and Pauly, Dennis.(eds.), *Proceedings of Sinn & Bedeutung 15*, 101-115. Saarland: Saarland University Press.
- Alexiadou, Artemis. 2010. Post-verbal Nominatives: An Unaccusativity Diagnostic under Scrutiny. In Folli, Rafaela and Ulbrich, Christina (eds.), *Interfaces in Linguistics: New Research Perspectives*, 56-77. Oxford: Oxford University Press.
- Avelar, Juanito. 2009. Inversão locativa e sintaxe de concordância no português brasileiro [Locative inversion and agrément syntax in Brazilian Portuguese]. *Matraga* 24. 232-52.
- Avelar, Juanito & Cyrino, Sônia. 2008. Locativos preposicionados em posição de sujeito: uma possível contribuição das línguas Bantu à sintaxe do português brasileiro [Preposed locatives in subject position: a possible contribution of Bantu languages to Brazilian Portuguese syntax]. *Revista de Estudos Linguísticos da Universidade do Porto* 3. 55-75.
- Avelar, Juanito & Galves, Charlotte. 2011. Tópico e concordância em português brasileiro e português europeu [Topics and agreement in Brazilian and European portuguese]. *Textos seleccionados do XXVI Encontro Nacional da Associação Portuguesa de Linguística*. 49-65.
- Barbosa, Pilar. 2011. Partial pro-drop as null NP-anaphora. In Fainleeb, Lena, LaCara, Nicholas & Park, Yangsook (eds.), *Proceedings of NELS 41*, 71-84. Amherst: GLSA Publications:
- Barbosa, Pilar. To appear. Pro as a minimal NP: towards a unified theory of pro-drop. *Linguistic Inquiry*.
- Belletti, Adriana & Rizzi, Luigi. 1988. Psych-verbs and  $\theta$ -theory. *Natural Language & Linguistic Theory*, 6(3). 291-352.

- Berlinck, Rosane. 1988. *A ordem VSN no português do Brasil: sincronia e diacronia*. Campinas: University of Campinas Thesis.
- Borer, Hagit. 2005. *Structuring sense II. The Normal Course of Events*. Oxford: Oxford University Press.
- Brody, Michael. 2013. Silent people. In Brandtler, Johan, Molnár, Valéria & Platzack, Christer (eds.), *Approaches to Hungarian: Volume 13: Papers from the 2011 Lund conference*, 33-43. Amsterdam: John Benjamins Publishing.
- Butthers, Christiane. 2009. *Emergência da ordem 'XP V (DP)' no PB Contemporâneo e o Parâmetro do Sujeito Nulo: uma abordagem minimalista [The emergence of XP V (DP) in contemporary Brazilian Portuguese and the null subject parameter: a minimalist approach]*. Belo Horizonte: Federal University of Minas Gerais thesis.
- Cavalcante, Sílvia. 2007. O sujeito nulo de referência indeterminada na fala culta carioca [The null indeterminate subject in Rio de Janeiro educated speech]. *Diadorim* 2. 63-82.
- Carvalho, Janayna. 2016. *A morfossintaxe do português brasileiro e sua estrutura argumental: uma investigação sobre anticausativas, médias, impessoais e a alternância agentiva [Brazilian Portuguese morphosyntax and its argument structure: an investigation of anticausatives, middles, impersonals and the agentive alternation]*. São Paulo: University of São Paulo dissertation.
- Chomsky, Noam. 1985. *Knowledge of language: Its nature, origin, and use*. New York: Praeger.
- Cinque, Guglielmo. 1988. On si constructions and the theory of arb. *Linguistic inquiry* 19. 521-581.
- Cohen, Ariel & Erteschik-Shir, Nomi. 2002. Topic, focus, and the interpretation of bare plurals. *Natural Language Semantics* 10. 125-165.
- Cyrino, Sônia. 2011. On complex predicates in Brazilian Portuguese. *Iberia: An International Journal of Theoretical Linguistics* 2.1-21.

- Deal, Amy Rose. 2009. The origin and content of expletives: evidence from selection. *Syntax* 12. 285-323.
- Déchaine, Rose-Marie & Wiltschko, Martina. 2002. Decomposing pronouns. *Linguistic inquiry* 33. 409-442.
- Duarte, Maria Eugênia. 1995. *A Perda do Princípio “Evite pronome” no Português Brasileiro [The loss of “Avoid Pronoun” principle in Brazilian Portuguese]*. Campinas: University of Campinas dissertation.
- Ferreira, Marcelo. 2000. *Argumentos nulos em português brasileiro [Null arguments in Brazilian Portuguese]*. Campinas: University of Campinas thesis.
- Figueiredo-Silva, Maria Cristina. 1996. *A posição sujeito no português brasileiro: frases finitas e infinitivas [The subject position in Brazilian Portuguese: finite and infinitive]*. Campinas: Ed. da UNICAMP.
- Freeze, Ray. 1992. Existentials and other locatives. *Language* 68. 553-595.
- Galves, Charlotte. 2001. *Ensaio sobre as gramáticas do português [Essays on portuguese grammars]*. Campinas, SP: Editora da Unicamp.
- Guéron, Jacqueline. 1982. Les opérateurs: contribution à une théorie de traits syntaxiques. In Guéron, Jacqueline & Sowley, Tim (eds.), *Grammaire transformatrice. Theorie et methodologies*, 185-219. Paris: Univ. de Paris VIII.
- Holmberg, Anders. 2005. Is there a little pro? Evidence from Finnish. *Linguistic Inquiry* 36. 533–564.
- Holmberg, Anders. 2010. The Null Generic Pronoun in Finnish: A Case of Incorporation in T. In Biberauer, Theresa, Holmberg, Anders, Roberts, Ian and Sheehan, Michelle (eds.). *Parametric variation: null subjects in minimalist theory*, 200-230. Oxford: Oxford University Press.

- Holmberg, Anders, Nayudu, Aarti & Sheehan, Michelle. 2009. Three partial null-subject languages: a comparison of Brazilian Portuguese, Finnish and Marathi. *Studia Linguistica*, 63.59-97.
- Holmberg, Anders & Nikanne, Urpo. 2002. Expletives, subjects, and topics in Finnish. In Svenonius, Peter (eds.), *Subjects, expletives, and the EPP*, 71-106. Oxford: Oxford University Press.
- Holmberg, Anders & Phimsawat, On-Usa. 2015. Generic pronouns and phi-features: evidence from Thai. In Biggs, Alison, Li, Man, Wang, Aiqing and Zhang, Cong. *Newcastle and Northumbria working papers in Linguistics ( Second Asia and European Linguistics Conference Proceedings)*, 55-71. Newcastle: Newcastle University. Available at: <http://www.ncl.ac.uk/linguistics/assets/documents/AE-LINKProceedings-Cong30july.pdf>
- Kayne, Richard. 2008. Expletives, datives, and the tension between morphology and syntax. In: Biberauer, Theresa. *The limits of syntactic variation*, 175-217. Amsterdam: John Benjamins.
- Kato, Mary. 1999. Strong pronouns and weak pronominals in the null subject parameter. *Probus* 11. 1-37.
- Kratzer, Angelika. 1995. Individual level predicates vs. stage level predicates. In Carlson, Gregory & Pelletier, Francy (eds.), *The generic book*, 125–175. Chicago: Chicago University Press.
- Lunguinho, Marcus 2006. Partição de constituintes no português brasileiro: características sintáticas [Phrase splitting in Brazilian Portuguese: syntactic characteristics]. In Garcia da Silva, Denise (org.), *Língua, Gramática e Discurso*, 133-146. Goiânia: Cãnone.
- Lunguinho, Marcus & Medeiros Junior, Paulo. 2013. Inventou um tipo novo de sujeito: Características sintáticas e semânticas de uma estratégia de indeterminação do sujeito no português brasileiro [A new type of subject: syntactic and semantic characteristics of na indeterminacy strategy in Brazilian Portuguese]. *Interdisciplinar-Revista de Estudos em Língua e Literatura* 9. 7-21
- Nunes, Jairo. 1990. *O famigerado se: uma análise sincrônica e diacrônica das construções com se apassivador e indeterminador*

[*The clitic se: synchronic and diachronic analyses of passive-se and indeterminate-se constructions*]. Campinas: University of Campinas Thesis.

- Nunes, Jairo. 2008. Inherent Case as a licensing condition for A-movement: the case of hyper-raising constructions in Brazilian Portuguese. *Journal of Portuguese Linguistics* 7. 83-108.
- Nunes, Jairo. 2015. *Breaching phi-features*. Handout delivered at LSRL16.
- Pilati, Eloísa. 2006. *Aspectos sintáticos e semânticos das orações com ordem verbo-sujeito no português do Brasil* [Syntactic and semantic aspects of verb-subject sentences in Brazilian Portuguese]. Brasília: University of Brasília Dissertation.
- Pilati, Eloísa & Naves, Rozana. 2013. Desenvolvendo a hipótese da cisão da categoria pronominal no português brasileiro [Developing the hypothesis of pronominal splitting in Brazilian Portuguese]. In: Moura, Denida and Sibaldo, Marcelo. (orgs.), *Estudos e Pesquisas em Teoria da Gramática*. Maceió: EDUFAL, 2013.
- Pontes, Eunice. 1987. *O tópico no português do Brasil* [The category Topic in Brazilian Portuguese]. Pontes Editores.
- Richards, Marc. 2007. On Object Shift, Phases, and Transitive Expletive Constructions in Germanic. *Linguistic variation yearbook*, 6. 139-159.
- Rigau, German. 1997. Locative Sentences and Related Constructions in Catalan, 395-421. In Mendikoetxea, Amaya & Uribe-Etxebarroa, Myriam (eds.) *Theoretical Issues at the Morphology-Syntax Interface*, 395-421. Bilbao: Universidad del País Vasco.
- Ritter, Elisabeth & Wiltschko, Martina. 2014. The composition of INFL. *Natural Language & Linguistic Theory* 32. 1331-1386.
- Rizzi, Luigi. 1982. *Issues in Italian syntax* Walter de Gruyter.
- Rizzi, Luigi. 1986. Null Objects in Italian and the Theory of Pro. *Linguistic Inquiry* 17. 501-557.



- Rizzi, Luigi. 1997. The Fine Structure of the Left Periphery. In Haegeman, Liliane (ed.). *Elements of Grammar*, 281-337. Netherlands: Springer.
- Rizzi, Luigi & Shlonsky, Uri. 2007. Strategies of Subject Extraction. In Sauerland, Uli and Gärtner, Hans-Martin (eds). *Interfaces + Recursion = Language? Chomsky's Minimalism and the View from Syntax-Semantics*, 115-16. Berlin: Mouton de Gruyter.
- Roberts, Ian. 2015. *Null subjects and null arguments*. Handout delivered at MPhil Seminar.
- Rodrigues, Cilene. 2004. *Impoverished morphology and A-movement out of Case domains*. Maryland: University of Maryland Dissertation.
- Rodrigues, Cilene. 2010. Possessor raising through thematic positions. In Hornstein, Norbert & Polinsky, Maria (eds.). *Movement theory of control*, 119–146. Amsterdam: John Benjamins.
- Stowell, Tim 1981. *Origins of phrase structure*. Massachusetts: Massachusetts Institute of Technology dissertation.
- Svenonius, Peter. 2010. Spatial p in English. Mapping spatial PPs. In: Cinque, Guglielmo & Rizzi, Luigi (eds.), *The cartography of syntactic structures*, 6, 127-160. Oxford: Oxford University Press.
- Torrego, Ester. 1989. Unergative-unaccusative Alternations in Spanish. *MIT Working Papers* 10. 253-72.
- Wood, Jim and Marantz, Alec. To appear. The interpretation of external arguments. In: D'Alessandro, Roberta, Franco, Irene & Gallego, Ángel (eds.), *The Verbal Domain*. Oxford: Oxford University Press