Small Nominals in Brazilian Portuguese Copular Constructions[*]

PATRICIA RODRIGUES
MARIA JOSÉ FOLTRAN

Abstract

The focus of this paper is copular clauses in Brazilian Portuguese like Mulher(es) é complicado, *in which the predicate exhibits an unmarked form for gender and number (masculine singular), despite the presence of the feminine and/or plural form of the noun in subject position. We reject the analyses that propose that (i) there is a hidden infinitive clause in the subject position, (ii) the agreement is an instance of semantic agreement, and (iii) the DP subject is in A-bar position, and argue that the subject is a Small Nominal (they are not projected as full DPs) which lacks index features that trigger external agreement (Pereltsvaig 2006).*

1. Introduction[1]

The focus of this paper is copular clauses in Brazilian Portuguese (BrP), in which the predicate exhibits an unmarked form for gender and number (masculine singular), despite the presence of the feminine and/or plural form of the noun in subject position, as in (1). Typically, this noun is a phrase with no determiner. The adjective in this type of sentence is interpreted as the predicate of a situation: the meaning of (1a), for example, is that situations involving a woman are complicated. Sentences in (1) contrast with typical

copular sentences in standard BrP, in which the predicate agrees in gender and number with the subject, as in (2). In this case, the predicate applies to an individual, rather than to a situation.

(1) a.   Mulher   é complicado.
         woman FEM/SING is complicated MASC/SING
         'Situations involving women are complicated.'
    b.   Crianças   é divertido.
         children FEM/PL is fun MASC/SING
         'Situations involving children are fun.'
    c.   Cem   convidados   é chato.
         one-hundred guests MASC/PL is annoying MASC/SING
         'Situations involving a hundred guests are annoying.'
(2) a.   Mulher   é complicada.
         woman FEM/SING is complicated FEM/SING
         'Women are complicated.'
    b.   Crianças   são divertidas.
         children FEM/PL are fun FEM/PL
         'Children are fun.'
    c.   Cem   convidados   são chatos.
         one-hundred guests MASC/PL are annoying MASC/PL
         'One hundred guests are annoying.'

Although the constructions in (1) do not present external agreement, they present internal agreement: when the noun in subject position is modified by an adjective, there is regular agreement between adjective and noun, as in (3).

(3) a.   Mulher   executiva   é complicado.
         Woman FEM executive FEM is complicated MASC
         'Situations involving executive women are complicated.'
    b.   Crianças   peraltas   é divertido.
         Children FEM/PL mischievous FEM/PL is fun MASC/SING
         'Situations involving mischievous children are fun'
    c.   Cem   convidados mal-educados é chato.
         one-hundred guests PL   impolite PL   is annoying SING
         'Situations involving one hundred impolite guests are annoying.'

Copular clauses of the kind of (1), in which there is mismatching subject-predicate agreement, are also found in Slavic and Scandinavian languages and in Hebrew. The neutral agreement of the adjective has been explained in different ways: (i) the subject is a hidden infinitive clause (cf. Faarlund 1977, for Norwegian; and Martin 1975, for Portuguese); (ii) the agreement is an instance of semantic agreement, and it is not triggered when the subject has a low degree in the individuation scale (cf. Enger 2004, for the Scandinavian

languages); (iii) the bare nominal occupies an A-bar position, therefore, agreement is not triggered (cf. Danon (2012)'s suggestion for Hebrew); (iv) the nominal in subject position lacks the required phi-features for the external agreement of the noun phrase (Wechsler and Zlatić 2000; Danon 2012; Duek 2012; Foltran and Rodrigues 2013).

This work argues against the three first analyses and assumes the latter, suggesting that the default agreement observed in the sentences in (1) can be explained by the absence of the required phi-features for subject-predicate agreement. We thus claim that the nouns have two sets of phi-features, the Index phi-features, required for the external agreement of the phrase, and the Concord phi-features, required for internal agreement (Wechsler and Zlatić 2000). More specifically, we argue, in line with Pereltsvaig's (2006) study on what she terms Small Nominals in Russian, that the nominal subjects in (1) behave like Small Nominals in that they are not projected as full DPs. As a result, they lack (valued) Index features, and predicate agreement is not triggered. Internal agreement, on the other hand, is triggered, because the Concord phi-features are lexically valued.

This paper is organized as follows. In section 2 we discuss the main characteristics of the constructions in (1). In section 3 we review studies on bare nominals in BrP (Müller 2004; Pires de Oliveira and Rothstein 2011; Schmitt and Munn 2002; Dobrovie-Sorin and Pires de Oliveira 2008), and show that their analyses cannot explain the data in (1). In section 4 we argue against the first three aforementioned analyses proposed for similar linguistic facts, showing that: (i) the subjects of the sentences in (1) do not have the distribution of an infinitive clause, which would be expected were they hidden infinitives; (ii) the subjects of the sentences in (1) occupy a high position in the scale of individuation proposed by Enger (2004), and yet, they do not trigger agreement; (iii) the construction with a neutral agreement can be observed in contexts known as small clauses, which, in principle, eliminates the possibility of proposing that its subject occupies an A-bar position. In section 5 we discuss two works that adopt the hypothesis of lack of phi-features for external agreement: Duek (2012) for BrP, and Danon (2012) for Hebrew; we will argue that both hypotheses have problems of empirical adequacy. In section 6 we present Pereltsvaig's (2006) analysis and discuss its advantages in explaining the sentences in (1). Lastly, we present our final remarks.

2. Copular sentences without agreement in BrP

As noted in the introduction, the sentences in (1) can have a counterpart in which the adjective agrees with the nominal in subject position, as in (2). In addition to the morphological differences, the sentences in (1) and (2) have different interpretations. In (2), where there is agreement, the adjective is a

predicate of an individual, while in (1), where there is no agreement, the adjective is interpreted as a predicate of a situation. Sentence (1a) means that situations involving women are complicated. Sentences (1b)-(1c) can be paraphrased in a similar way.

These two types of constructions are possible, because the adjectives *complicado* 'complicate', *divertido* 'fun' and *chato* 'annoying' select both situations and individuals. In the cases of adjectives that predicate solely on individuals, as *vaidoso* 'vain', *bagunceiro* 'untidy' or *magro* 'thin', the agreement is obligatory, as shown in (4)-(5). In other words, since these adjectives cannot be predicates of a situation, the use of a neutral form renders the sentence ungrammatical. Conversely, if we accept that some adjectives, as *inconcebível* 'inconceivable', can only predicate a situation, the constructions with agreement would be ungrammatical (6).

(4) a. *Mulher   é vaidoso.
         woman $_{FEM/SING}$ is vain $_{MASC/SING}$
    b. *Crianças   é bagunceiro.
         children $_{FEM/PL}$ is untidy $_{MASC/SING}$
    c. *Cem   convidados   é magro.
         one hundred guests $_{MASC/PL}$ is thin $_{MASC/SING}$
(5) a. Mulher   é vaidosa.
         woman $_{FEM/SING}$ is vain $_{FEM/SING}$
         'Women are vain.'
    b. Crianças   são bagunceiras.
         children $_{FEM/PL}$ are   untidy $_{FEM/PL}$
         'Children are untidy.'
    c. Cem   convidados   são magros.
         one hundred   guests $_{MASC/PL}$ are thin $_{MASC/PL}$
         'One hundred guests are thin.'
(6) a. *Crianças   são inconcebíveis.
         children $_{FEM/PL}$ are   inconceivable $_{FEM/PL}$
    b. Crianças   é inconcebível.
         children $_{FEM/PL}$ is inconceivable $_{SING}$
         'Having children is inconceivable.'

The main characteristic of these copular constructions, in which the adjective appears in the neutral form[2], is that the subject must be a bare nominal, as in (1a)-(1b), or a quantified nominal phrase with no determiner,

---

[2] We use the term "neutral form of the adjective" meaning "unmarked form". In Portuguese, this form is masculine singular. In Scandinavian languages, for example, the unmarked form is expressed by the neutral gender, which opposes the masculine and feminine forms.

as in (1c). In (1c) we can only obtain what we will call a "collective reading"; we cannot obtain an individual reading. That is, (1c) means that the situation of having one hundred guests is annoying, and not that a hundred specific guests are annoying. To obtain this reading there must be agreement, as in (2c).

In these constructions we can then observe the impossibility of using definite subjects, as in (7), as well as other types of indefinites, as in (8). They also present restrictions on binding (9). Furthermore, as we noted in the introduction, in (3), when the noun is modified by an adjective, there is regular agreement between adjective and noun.

(7) a.   *A   mulher   é complicado.
         The $_{FEM}$ woman $_{FEM}$ is complicated $_{MASC}$

    b.   *Ela   é complicado.
         she $_{FEM}$ is complicated $_{MASC}$

    c.   *Maria   é complicado.
         Maria $_{FEM}$ is complicated $_{MASC}$

(8) a.   *Uma mulher   é complicado.
         a $_{FEM}$ woman $_{FEM}$ is complicated $_{MASC}$

    b.   *Uma mulher   que eu conheço é complicado.
         a $_{FEM}$ woman $_{FEM}$ that I know   is complicated $_{MASC}$

(9) a.   *Mulher   é complicado   pra ela mesma.
         woman $_{FEM}$ is complicated $_{MASC}$ for   herself $_{FEM}$

    b.   Mulher   é complicada   pra ela mesma.
         woman $_{FEM}$ is complicated $_{FEM}$ for   herself $_{FEM}$
         'Women are complicated for themselves'

In what follows, we will review some works on bare nominal in BrP and also some analyses proposed for similar linguistic facts as those presented in this section. We will then show their inadequacy, and will assume a phi-feature based analysis to explain the peculiarity of these constructions.

3. Bare nominals in Brazilian Portuguese

Works on BrP bare nominals differ in their analyses. Particularly, there is no consensus on the syntactic structure or on the semantics of the bare singular. We can identify in the literature two lines of analysis: one that assumes that bare singular phrases denote kinds (Pires de Oliveira and Rothstein 2011; Schmitt and Munn 2002; Dobrovie-Sorin and Pires de Oliveira 2008), constituting DPs with null D and neutral in number (Schmitt and Munn 2002), and another that postulates the opposite, that is, that they do not denote kinds and occupy non-argument position (Müller 2004). Müller claims that the bare singular is indefinite in the sense of Heim (1982), and

thus has a variable to be bound, denoting a set of individuals, and is, in any case, a predication on individuals. In the analyses we reviewed, the authors only work with examples in which agreement is triggered. Examples without agreement, like those presented in (1), are not considered. Hence, these analyses predict that sentences with a bare singular subject will have a generic reading which involves individuals, be this reading related to kind-reference or dependent upon generic quantification. The sentence (5a), for example, would have the readings in (10). Nonetheless, the predicate in (1a) does not apply to an individual; the application of 'complicated' to woman is based on the evaluation of situations involving women being complicated.

(10) a. Typically, if 'x' is a specimen of the kind woman, then 'x' is vain. (kind)
     b. Typically, if 'x' is a woman, then 'x' is vain. (indefinite)

Bare plurals are also seen as kinds or as generic indefinites, hence their readings also involve individuals. However, the reading of (1b), with a bare plural as subject, is a situation reading. Concerning the quantified nominals without determinant, in the non agreeing sentences, they can only get a "collective" reading. The sentence in (1c), for example, means that situations involving the quantity of one hundred guests are annoying; it does not mean that there are one hundred guests, specific or non specific, that are annoying.

Consequently, these approaches to bare nominals in BrP can only apply to bare nouns in sentences with agreement, as in (2), since their predicates have an individual property reading; they cannot apply to copular sentences without agreement, as in (1), since their predicates have a situation reading.

4. Analyses in the literature

4.1 Going against the analysis of a hidden infinitive sentence

The main idea behind the analysis of a hidden infinitive sentence is that the subject in sentences such as those in (1) can be paraphrased by an infinitive clause, as in (11).

(11) a. Lidar   com mulher   é complicado.
         (to) deal with woman FEM/SING is complicated MASC/SING
         'Dealing with women is complicated.'
     b. Cuidar   de crianças   é divertido.
         (to) take care of children FEM/PL is fun MASC/SING
         'Taking care of children is fun.'
     c. Receber   cem   convidados   é chato.
         (to) receive one hundred guests MASC/PL is annoying MASC/SING
         'Receiving one hundred guests is annoying.'

The postulation of an underlying infinitive clause to the subjects in (1) would more easily explain the agreement facts observed: the apparent lack of agreement follows from the fact that the predicate actually agrees with a clausal subject. This analysis, however, does not explain some constraints seen in these constructions.

First, this analysis does not explain why sentences that lack agreement are restricted to sentences with nominal phrases with no determiner in subject position. Sentences like (12a), which have a definite subject, are not possible with the predicate adjective in the neutral form. However, the sentence with an overt infinitive is perfectly possible (12b).

(12) a. *Minha   mulher   é divertido
   my _{FEM/SING} woman _{FEM/SING} is fun _{MASC/SING}
  b. Beijar   minha   mulher   é divertido.
   (to) kiss my _{FEM/SING} woman _{FEM/PL} is fun _{MASC/SING}
   'Kissing my wife is fun.'

Secondly, according to Wechsler's (2011) observations on a type of sentences in Scandinavian languages known as 'pancake' sentences, as (13)[3], this analysis makes the wrong prediction that the subject noun phrase of the 'pancake' sentences has the same distribution of an infinitive clause. He shows that the subject of these sentences cannot be extraposed, contrary to infinitival sentences. The examples in (14)-(15) of BrP show this restriction.

(13) Pannekaker er   godt.
  pancakes _{PL} is   good _{NEUT/SING}
  'Pancakes are good.'
(14) *É divertido crianças pequenas.
  is fun _{MASC/SING} children small _{FEM/PL}
(15) a. Cuidar   de crianças   pequenas   é divertido.
   (to) take care of children _{FEM/PL} small_{FEM/PL} is fun _{MASC/SING}
   'To take care of small children is fun'
  b. É divertido   cuidar   de crianças   pequenas.
   is fun _{MASC/SING} (to) take care of children _{FEM/PL} small _{FEM/PL}
   'It is fun to take care of small children'

---

[3] As already mentioned, in Scandinavian languages the adjective has a masculine / feminine form and a neutral form. There are copular sentences in which the predicative adjective presents the neutral form, despite the presence of a masculine / feminine form of the name in subject position. These sentences are known as 'pancake' sentences, and are so named because of the examples studied. The sentence in (13) is from Norwegian (Enger, 2004, p. 7).

Further evidence was proposed by Hellan (1986) (*apud* Danon 2012): if we add a complement to the predicate, the paraphrase with the infinitive is impossible. This is what appens in BrP, as seen in (16).

(16) Água mineral é bom para lavar o cabelo.

    water mineral is good for washing the hair

    'Spring water is good for washing the hair.'

These facts are evidence against the analysis that posits a hidden infinitive in subject position of copular sentences.

4.2 Against Semantic Agreement

Enger (2004) contends that the use of the neutral form in 'pancake' sentences of Scandinavian languages is a manifestation of semantic agreement. He reclaims the traditional idea that subjects in these types of sentences refer to propositions, and suggests a slightly different analysis: these subjects have a low degree of individuation, that is, they do not behave like prototypical subjects – proto-agents, in Dowty's (1991) terms. According to this analysis, agentive subjects trigger syntactic agreement. According to Enger, the nouns in 'pancake' sentences are usually inanimate, and even if they seem animate, they will not typically be interpreted as such. Thus, they have a low potential for agentivity, and therefore do not trigger syntactic agreement. Enger assumes the continuum of individuation proposed by Sasse (1993) (*apud* Enger 2004), a notational variant of the more familiar hierarchy of animacy (Fig. 1).

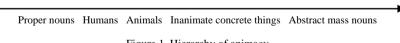Proper nouns   Humans   Animals   Inanimate concrete things   Abstract mass nouns

Figure 1. Hierarchy of animacy

The idea is that 'pancake' sentences are obtained when noun phrases with referents with a low degree of individuation are used as subjects. Thus, typical subjects in 'pancake' sentences are names that refer to inanimate objects, abstract nouns and mass nouns. However, the subjects of the sentences in (1) occupy a high position in the scale of individuation proposed by Enger (2004) and do not trigger agreement. We thus reject the author's proposal that agreement occurs for semantic reasons and assume that the agreement is syntactic.

4.3 Against the analysis of the nominal in an A-bar position

In his study of Hebrew ze-copula clauses, which do not show agreement, as in (17)[4], Danon (2012) discusses an analysis in which *ze* is the subject pronoun of the sentence, and the noun occupies an A-bar position, on the left, as in (18). A similar analysis is proposed for the characterizing copular sentences of French, as in (19), in which the pronoun *ce* 'it' occupies the subject position.

(17) yeladim ze macxik / *macxikim.   (Danon 2012, 4)
       children M-P ZE-M-S funny-M-S / *funny-M-P
       'Something (contextually determined) involving children is funny'.
(18) DP_i [$_{TP}$ ze_i Pred]
(19) Cette valise, c'est pratique.   (Roy 2013, 52)
       this suitcase, it is practical
       'This suitcase is practical.'

Danon rejects this analysis for sentences like (17) based on some facts of Hebrew. For example, as a pronoun, *ze* is usually restricted to non-human and inanimate referents, and this is not consistent with this kind of sentences. Also, if *ze* was merely the subject, preceded by a left-dislocated topic, this would not explain the fact that *ze* is limited to sentences in the present tense. Danon also contends that sentences with left dislocation are different from copula *ze*-clauses with respect to word order; he shows that when a Wh-movement occurs in a sentence with copula *ze*, the Wh-constituent precedes the DP, as in (20) (Danon, 2012, 10).

(20) a. nemerim ze mafxid me'od.
             tigers-M-P ZE-M-S scary-M-S very
             'Tigers are very scary.'
       b. ad $kama_i$ nemerim ze mafxid t_i?
             to what $extent_i$ tigers-M-P ZE-M-S scary-M-S
             'To what extent are tigers scary?'

It is not very easy to reject this analysis for BrP, because several studies consider it to be a topic prominent and a null subject language. Thus, a possible analysis for the sentences in (1) is the structure in (21).

(21) DP_i [$_{TP}$ pro_i Pred]

---

[4] Danon's (2012) study will be presented in the next section.

Nonetheless, we also reject this analysis. First, we can observe in BrP the same phenomenon exemplified by Danon in (20). The BrP example in (22a) shows that the Wh-phrase precedes the bare nominal *criança* 'child' in an interrogative sentence, which suggests that the bare nominal is in subject position, not in topic position. When the bare nominal occupies a left-dislocated position, as in (22b), it precedes the Wh-phrase. In such cases, it is worth noting that the subject can be replaced by the pronoun *isso* 'this', and not by *ela* 'she' or *elas* 'they', as would be expected if the denotation of the word 'child' were an individual.

(22) a. Quando$_i$ que criança é divertido t$_i$?
         when$_i$ that child   is fun t$_i$
         'When is it that children are fun?'
     b. Criança, quando$_i$ que isso é divertido t$_i$?
         child,   when$_i$ that this is fun t$_i$
         'Children, when are they fun?'

Another fact that would normally rule out the analysis of a DP in topic position is illustrated in the sentence in (23a). In this sentence, the predication *mulher complicado* 'woman complicated' appears as complement of the verb *considerar* 'consider', traditionally accepted as the context of a small clause. The analysis of the structure of the small clauses complements of *consider* do vary, but apparently these constructions do not have a position to hold a topic.

(23) a. Pedro considera mulher complicado.
         Pedro considers woman complicated
         'Pedro considers women to be complicated.'
     b. *Pedro considera a Maria, ela inteligente.
         Pedro considers the Maria, she intelligent

As a final argument, following Danon (2012), we can cite the Scandinavian "pancake" sentences, which do not involve the presence of anything that can occupy subject position, if the noun is analysed as a left-dislocated element[5]. Additionally, as noted by Danon, the nominal in a left-dislocated position in the sentence and a null pronoun in subject position

---

[5] This is also the case of the French sentence in (i), which shows that this language has cases of mismatch agreement with a plural quantified subject. Considering that French does not have null subjects, this sentence could not bear an analysis like (21). It is worth noting that the reading available for this sentence is the "group" reading, not the "individual" reading.
(i)   Trois livres suffira. (from Marie Labelle, pers. comm.)
      three books be enough $_{FUT\ 3PS}$
      'Three books will be enough.'

could explain the absence of agreement, but would not explain the obtained situation reading.

In this section, we discussed three analyses proposed in the literature to explain the adjective's neutral agreement in copular constructions, and presented empirical and theoretical evidence that shows that they are not adequate to explain the examined data. In the next section, we will present two analyses which are compatible with the assumption that the subjects in (1) do not trigger external agreement.

5. Absence of Index phi-features

Several studies on hybrid agreement and default agreement adopt the hypothesis that nouns carry two sets of phi-features, the Index phi-features and the Concord phi-features, systematized in HPSG by Wechsler and Zlatic (2000), based on Pollard and Sag (1994) and Kathol (1999). Generally speaking, the Concord features are understood as linked to grammatical properties of the noun, and Index features, to the semantic properties, mainly the referentiality. The Concord features are then related to the internal agreement of the phrase which has the noun, and the Index features, to the subject-predicate agreement.

In this section we will examine two studies that purport to explain cases of neutral agreement in copular constructions based on this distinction of features: Duek (2012), for BrP, and Danon (2012), for Hebrew. For Duek, Index features are not available for kinds with arbitrary gender, and for Danon, the copula and D lack Index features. We reject both analyses on an empirical basis, considering Brazilian Portuguese data. In the following section we will present Pereltsvait's (2006) analysis, which we argue can account for the agreement facts at the syntactic level.

5.1 Duek (2012)

Duek considers only the sentences in BrP with bare singular in subject position. The relevant examples of her study are in (25). The author proposes an analysis based on the distinction between bare singular with natural gender, like *atriz* 'actress', and bare singular with arbitrary gender, like *maçã* 'apple'. For her, the lack of agreement is only observed (and necessary) when the bare singular has an arbitrary gender.

(25) a. Atriz   é vaidosa /*vaidoso.
         actress ꜰᴇᴍ/ꜱɪɴɢ is vain ꜰᴇᴍ/ꜱɪɴɢ /*vain ᴍᴀꜱᴄ/ꜱɪɴɢ
         'Actresses are vain.'

     b. Maçã   é gostoso /*gostosa.
         Apple ꜰᴇᴍ/ꜱɪɴɢ   is tasty ᴍᴀꜱᴄ/ꜱɪɴɢ /*tasty ꜰᴇᴍ/ꜱɪɴɢ
         'Apples are tasty.'

Duek assumes that the gender system of the Romance languages marks two distinctions: a distinction inter-kinds, differentiating kinds with natural gender from kinds without natural gender (marked with an arbitrary gender), and, in the case of kinds with natural gender, a distinction intra-kind, that differentiates the feminine from the masculine sex of the instances of the kind.

To explain the agreement patterns of (25), the author proposes that the bare noun is a NP that denotes a kind and that predicative adjectives agree with the set of the NP's Index features – these features, when valued, encode the NP's ability to refer to individuals that denote a kind. In other words, the Index phi-features become available when the kind is realized by means of instantiation functions. The natural gender would be such a function, a function from the kinds to the set of instantiations of that kind, which have the "female" property or do not have the "female" property; it is a feature on the *n* categorizer that applies to the nominalized root. As for the arbitrary gender, it is a feature of the root, determined in the lexicon – in nouns which are low in the scale of individuation, the gender does not mark an intra-kind distinction (the value of the features is not predictable). Thus, the NP with natural gender has an Index feature of gender valued in view of the semantic contribution of the gender in this case. The NP can then refer to a set of outputs of the kind, but not to a particular instance, because the number is still non-specified (the domain of the object depends on the presence of number). Duek clarifies that the gender Index feature, in addition to controlling agreement, also controls PRO and anaphora binding.

The major problem of Duek's work is empirical, since the sentences in (26) and (27) are possible, but they do not fall under the generalization proposed by the author. In (26), the nouns have arbitrary gender, and yet there is a correlation with the predicative adjective. In (27), on the other hand, the nouns have natural gender and there is no agreement with the predicative adjective.

(26) a. Moqueca   é apimentada.
          moqueca $_{FEM}$ (a fish dish) is spicy $_{FEM}$
          'Moqueca is spicy.'

     b. Melancia   é suculenta /vermelha / redonda.
         watermelon $_{FEM}$ is juicy $_{FEM}$ /red $_{FEM}$ /round $_{FEM}$
         'Watermelons are juicy /red /round.'

     c. Manga   é benéfica   para o controle   do   diabetes.
         mango $_{FEM}$ is beneficial $_{FEM}$ for the controlling of+the diabetes
         'Mango is beneficial for controlling diabetes.'

     d. Grama   é escorregadia.
         grass $_{FEM}$ is slippery $_{FEM}$
         'Grass is slippery.'

e. Maçã   é gostosa   com casca.
   apple _{FEM} is tasty _{FEM} with skin
   'Unpeeled apples are tasty.'

f. Maçã   é mais ácida   que pera.
   apple _{FEM} is more acidic _{FEM} than pear
   'Apples are more acidic than pears.'

(27) a. Atriz   é complicado.
     actress _{FEM} is complicated _{MASC}
     'Situations involving actresses are complicated.'

b. Menina é divertido.
   girl _{FEM} is fun _{FEM}
   'Situations involving girls are fun.'

We would also like to emphasize that Duek does not take into consideration the role of the predicative adjective in these constructions. We pointed out in section 2 that in copular sentences that exhibit mismatching agreement, the predicate is interpreted as a predicate of a situation. The interpretation of (27), for example, is that any situation involving an actress or a girl is complicated or fun. Agreement must happen when the adjective is a predicate of individuals. Thus, in Duek's example (25a), the ungrammaticality of *atriz é vaidoso* 'actress is vain' is due to the fact that *vaidoso* 'vain' is not a predicate of a situation, but of individuals. And the ungrammaticality of (25b), *maçã é gostosa* 'apple is tasty', can be questioned if we observe the examples in (26e-f). Moreover, Duek does not take into consideration examples like (1b-c), with a bare plural and a quantified phrase without determiner in subject position. According to the author's proposal, only a sentence with agreement would be possible in these cases, because in addition to the fact that nouns possess natural gender, producing a set of instantiations of kind, the feature 'number' instantiates specific individuals.

With this discussion in mind, we conclude that a differentiation between nouns with natural gender and nouns with arbitrary gender is not pertinent in the explanation of the relevant data in this work.

5.2 Danon (2012)

Danon's study investigates Hebrew non-agreeing *ze*-copula clauses. The author explains that among the different types of copula clauses in Modern Hebrew, there are two types of pronominal copula that are used in sentences with no verb in the present: i) *hu/hi/hem/hen*, which are homophones of the third person pronoun, and which agree in number and gender with the subject – cf. (28); and ii) *ze/zot/ele*, which are homophones of the demonstrative pronoun, and never agree with the subject – cf. (29) (Danon 2012, 4).

(28) yeladim hem macxikim / *macxik.
      children-M-P PronH-M-P funny-M-P / *funny-M-S
      'Children are funny.'
(29) yeladim ze macxik / *macxikim.
      Children-M-P ZE-M-S funnyM-S / *funny-M-P
      'Something (contextually determined) involving children is funny.'

The sentence in (28) has an interpretation of "elliptic eventuality", that is, the predicate refers to an eventuality, understood as related to the explicit subject, and not to the literal denotation of the subject, as in (28). Danon also points to another possible interpretation of *ze*-copula clauses: the sentence in (30) has what he calls "interpretation of classification" – in this case, the subject is interpreted as related in some way to a red form.

(30) tlunot ze tofes adom.
      complaints $_{FEM/PL}$ copula $_{MASC\text{-}SING}$ form $_{MASC/SING}$ red $_{MASC\text{-}SING}$
      'Complaints (should) involve a red form.'

Furthermore, Danon noted that the subjects of *ze*-copula clauses can be generic, as in (31), non-specific indefinite, as in (32) or referential definite, as in (33).

(31) nemerim   (ba-bayit)   ze   nexmad
      tigers-M-P   in-the-house   ZE-M-S nice- M-S
      '(Having/dealing with) tigers (at home) is nice.'
(32) šney   orxim   ze   me'acben.
      two   guests- M-P   ZE-M-S annoying- M-S
      '(Having) two guests is annoying.'
(33) ha-bibliyografya   ze   tov.
      the-bibliography-F-S ZE-M-S good- M-S
      '(Having/doing) the bibliography is good.'

According to the author, *ze*-copula clauses should have a unified explanation, even if their interpretations are different. He calls attention to the fact that these clauses are not predicative, since in fact the predicate does not refer to the subject. The question he asks is how the syntax of *ze*-copula clauses is related to the observed interpretations, since it is impossible for an agreement operation to trigger any kind of semantic effect. He thinks that there should be an independent factor responsible for both the divergent agreement and the semantic effects. He asserts that this factor is the absence of interpretable features in the subject, which could happen only with a non-thematic subject.

Danon suggests two approaches to account for the lack of interpretable features in the subject. One assumes that the DP consists of multiple levels,

each with its own set of features, and that D in *ze*-copula clauses does not possess features that make the DP visible for external agreement. The other approach assumes the distinction between Index and Concord features. The subject of *ze*-copula clauses possesses Concord features, but not Index features. Danon claims that these two approaches capture the idea that the subject of the *ze*-copula clause is defective with respect to agreement features, and in his work he uses the term INDEX to refer to both proposals. For him, the copula *ze* is also featureless. He concludes that the absence of Index features causes the subject to be marked as a non-argument. The subject is a predicate, and the sentence is interpreted as a result of the relationship between two predicates. To explain the elliptic eventuality reading, Danon proposes that it be "the result of shifting the denotation of the subject to a contextually determined property P related to the overt nominal".

Although Danon's analysis would allow us to explain the linguistic facts under analysis without the need to resort to peculiar semantic categories to justify syntactic effects, it does not explain the fact that only predicates of situations can appear in these non-agreeing constructions. In other words, if the subject is not an argument, what will restrain the subject-predicate relationship? We claim then that the subject is an argument that denotes a situation, and this is what the predicate selects for. Also, in following Danon's analysis, we would have to postulate, in BrP, the existence of two kinds of abstract Ds, one that has agreement features and another that lacks them. In the next section, we present Perltsvaig's (2006) proposal, which will allows us to treat the subject of the non-agreeing sentences as arguments, and thus avoid hypothesizing two abstract Ds.

6. Bare nominals as Small Nominals

6.1 Pereltsvaig (2006)

Pereltsvaig (2006) investigates what she terms Small Nominals in Russian: nominals which lack some or all functional projections. She based her analysis on examples like those in (34) and (35), which contrast in their agreement. The bracketed subject *pjat' izvestnyx aktërov* 'five famous actors' may or may not trigger plural agreement on the verb: in (34) the predicate appears in the 3rd person neuter default form, and in (35) the predicate appears in the plural form.

(34) V ètom fil'me igralo [pjat' izvestnyx aktërov].
       in this film played.NEUT [five famous actors]
       'Five famous actors played in this film.'
(35) V ètom fil'me igrali [pjat' izvestnyx aktërov].
       in this film played.PL [five famous actors]
       'Five famous actors played in this film.'

In comparing these two kinds of sentences, Pereltsvaig shows that, although these two kinds of nominals appear in the same syntactic position, they exhibit different properties. In the non-agreeing constructions, the nominal subjects do not establish individual reference (they have a group interpretation), they do not trigger external agreement, and they cannot serve as an antecedent for an anaphor or as a controller of PRO. In the agreeing constructions, differently, the subjects are referential in the sense of picking out an individual referent, they do trigger external agreement, and they can serve as an antecedent for an anaphor as well as a controller of PRO. To account for these differences, she proposes the Small Nominal Hypothesis, namely, that the two types of subjects differ in their internal structure: agreeing subjects are DPs, whereas non-agreeing subjects are Small Nominals – they would be QPs[6] or NPs, lacking then some or all functional categories (crucially they lack DP). The author establishes a parallelism of Small Nominals to Small Clauses, which do not project TP. The similarity between these two categories goes on: like Small Clauses, Small Nominals can occupy argumental positions in the sentences and, as Small Clauses lack temporal reference, Small Nominals lack individual reference.

To answer the question of how the correlations between these nominals and agreement can be accounted for, she assumes a distinction between a set of unvalued phi-features and a set of fully valued phi-features. For her, the phi-features are valued only at the level of DP. Hence, Small Nominals would have unvalued phi-features. These features are different from the grammatical gender and number features of the noun, which would be lexically valued. The redundancy between unvalued and valued gender and number features in Small Nominals would be necessary in order to explain the discrepancies between attributive agreement (internal agreement) and predicative agreement (external agreement). This proposal of two sets of features is similar to the proposal that distinguishes Index features from Concord features, introduced in the previous section. This hypothesis explains, according to Pereltsvaig, the cases of mismatching agreement observed in Russian (and Norwegian): Small Nominals have grammatical gender and number features specified in N (Concord features), but lack valued gender and number phi-features (Index features); hence, they exhibit internal agreement, but fail to trigger external agreement, as seen in (36) (Pereltsvaig 2006, 487).

---

[6] Pereltsvaig uses the term QP (quantity phrases). We will use NumP for the same projection.

(36) a. Včera tancevalo [$_{QP}$ { dva tancosvščika / dve baleriny}].
yesterday danced.$_{NEUT}$ two.$_{MASC}$ dancer.$_{MASC}$ / two.$_{FEM}$ ballerinas.$_{FEM}$
'Yesterday danced {two male dancers / two ballerinas}'.

b. V Mariinskom teatre tancevalo [$_{QP}$ pjat' velikix balerin]
in Mariinsky theater danced.$_{NEUT}$ five great.$_{GEN.PL}$ ballerinas.$_{GEN.PL}$
'In the Mariinsky Theater danced five famous ballerinas'.

Pereltsvaig argues that although both DPs and Small Nominals can occupy argument positions, only DPs can be of type <e>. In her words, "Small Nominals denote either properties, as in the case of bare NPs (e.g., boy), or 'sums ... with n atoms', as in the case of QPs (e.g., three boys)" (Pereltsvaig 2006, 435). Thus, she rejects the view that all (argument) nominals within the same language are of the same size, and, against Longobardi 1994 and Chierchia 1998 *inter alia*, she claims that a language can have both DPs and Small Nominals.

Briefly, for Pereltsvaig, the distinction between unvalued phi-features in N and valued phi-features in D is related to distinct phenomena, generally associated with a referential index: (i) phenomena that require a set of phi-features, valued or not, as thematic relations, and (ii) phenomena that require a fully valued set of phi-features, as control, agreement and anaphor binding. Hence, Small Nominals can enter into thematic relations, occupying an argumental position, but cannot enter into control, binding and agreement relations.

6.2 Brazilian Portuguese data

Going back to our examples, we propose that the nominals in subject position in (1) do not trigger agreement because they are Small Nominals: *mulher* 'woman' in (1a) is a NP and denotes a property; *crianças* 'children' in (1b) and *cem convidados* 'one hundred guests' in (1c) are NumPs and denote "sums of atoms". The Small Nominal hypothesis allows us to explain the properties observed in these non-agreeing constructions in BrP. The fact that the predicates in these constructions select for a situation would be more easily accounted for if the nominal in subject position could occupy an argument position and enter into a thematic relationship. Also, the proposal that anaphor binding implicates matching of fully valued phi-features explains the data in (9), where the subject cannot serve as an antecedent for the anaphor. Furthermore, this hypothesis would also explain the fact that there is agreement on attributive adjectives, but there is no agreement on predicative adjectives, as seen in (3), and the fact that we cannot have subjects with an explicit D in these constructions, as seen in (7)-(8).

This assumption allows us to treat agreement in a strictly syntactic manner; nonetheless, we recognize that there are semantic issues involving these nominals that need further explanation. We still need to explain how

Small Nominals can denote a situation, yielding what we termed a situation reading for these constructions.

7. Conclusion

In this article we analysed copular sentences without agreement, presented in (1), whose subject position is occupied by nominals that are interpreted as denoting a situation. We have seen that Scandinavian languages and Hebrew show linguistic facts that closely resemble the facts analysed on this work.

Assessing the analyses on other languages, we rejected those that consider that: the subject phrase is the expression of a hidden infinitive clause; neutral agreement is triggered by semantic factors; the noun phrase is dislocated to an A-bar position. We presented theoretical and empirical arguments to reject each of these analyses.

Our work is theoretically aligned with Danon's (2012) and Duek's (2012) framework regarding the presence of two sets of features in nominal subject: those responsible for internal agreement (Concord) and those responsible for external agreement (Index). However, for empirical reasons, we also rejected their analyses, and adopted Pereltsvaig's (2006) Small Nominal Hypothesis to explain our data. We proposed that the nominal subjects in (1) are Small Nominals in that they are not projected as full DPs. Hence, the Index features of these nominals are not valued, and therefore agreement with the predicate is not triggered.

Through the analysed examples, we saw that only the bare singular, the bare plural and quantified phrases (in these cases, predication occurs on the set only, without allowing the distributive reading) may appear in this type of construction. We believe that these examples may contribute to the study of bare nominals. They are peculiar constructions, which do not trigger agreement, and their predication is understood as a predication of the situation, that is, it is not interpreted as a predicate of a kind or as a predicate of a set of individuals. We believe that we are dealing with a bare nominal with specific semantic properties, which needs to be further clarified by semantic theories.

References

Danon, G. (2012) Nothing to Agree on? Non-agreeing subjects of copular clauses in Hebrew. *Acta Linguistica Hungarica* **59** (1-2), 85-108. Available at https://faculty.biu.ac.il/~danong1/papers/Danon2012ALH.pdf

Dobrovie-Sorin, C. & Pires de Oliveira, R. (2008). Reference to kinds in Brazilian Portuguese: definite singulars vs bare singulars. In *Proceedings of SuB 12* (A. Grønn, editor), pp. 107-121. Oslo: University of Oslo.

Dowty, D. (1991) Thematic Proto-Roles and Argument Selection. *Language* **67** (3), 546-619.

Duek, K. (2012). Bare nouns and gender agreement in Brazilian Portuguese. Paper presented at the 48th Annual Meeting of the Chicago Linguistics Society (CLS 48), University of Chicago. Available at http://people.ucsc.edu/~kduek/ Karen%20Duek%20-%20Bare%20 singulars%20and%20gender%20agreement% 20in%20Brazilian%20 Portuguese%20(1).pdf

Enger, H-O. (2004) Scandinavian pancake sentences as semantic agreement. *Journal of Linguistics* **27** (1), 5-34.

Faarlund, J. T. (1977) Embedded clause reduction and Scandinavian gender agreement. *Journal of Linguistics* **13**, 239-57.

Foltran, M. J. & Rodrigues, P. (2013) On denoting abstract entities. *Revista da ABRALIN* **12** (1), 269-291.

Heim, I. (1982) The Semantics of Definite and Indefinite Noun Phrases. PhD diss., University of Massachusetts at Amherst.

Hellan, L. (1986) The Headedness of NPs in Norwegian. In *Features and Projections* (P. Muysken & H. Van Riemsdijk, editors), pp. 89-122. Dordrecht: Foris.

Kathol, A. (1999) Agreement and the syntax-morphology interface in HPSG. In *Studies in Contemporary Phrase Structure Grammar* (R. Levine & G. Green, editors), pp. 223-274. Cambridge: Cambridge University Press.

Martin, J. W. (1975) Gênero? *Revista Brasileira de Linguística* **2**, 3-8. Available at http://people.ufpr.br/~borges/publicacoes/notaveis/Genero.pdf.

Müller, A. (2002) The semantics of generic quantification in Brazilian Portuguese. *Probus* **14**, 279-298.

Pereltsvaig, A. (2006). Small Nominals. *Natural Language and Linguistic Theory*, v. **24**, 433-500.

Pollard, C. & Sag, I. (1994). *Head-Driven Phrase Structure Grammar.* Chicago: CSLI Publications.

Roy, I. (2013) *Nonverbal predication*. Oxford: Oxford University Press.

Sasse, H. J. (1993) Syntactic categories and subcategories. In *Syntax Ein internationals Handbuchzeitgen össischer Forschung* (J. Jacobs, A. Setechow, W. Sternefeld & T. Vennemann, editors), pp. 646-86. Berlin: de Gruyter.

Schmitt, C. & Munn, A. (2002) The syntax and semantics of bare arguments in Brazilian Portuguese. *Linguistic Variation Yearbook* **2**, 253-281.

Taveira da Cruz, R. (2008). *O singular nu e a (pseudo) incorporação no PB.* PhD Dissertation. UFSC.

Wechsler, S. (2011). The structure of Swedish pancakes. Paper presented at CSSP 2011, Université Paris 8. Available at https://sites.google.com/site/ wechslerpublications/ presentations.

Wechsler, S. & Zlatic, L. (2003) *The Many Faces of Agreement.* Stanford: CSLI Publications.

Patrícia Rodrigues
Universidade Federal do Paraná
rodriguespatriciaa@gmail.com
Rua General Carneiro, 460, 11° andar, Curitiba,
Paraná, Brazil, 80060-150

Maria José Foltran
Universidade Federal do Paraná/CNPq
mariajose.foltran@gmail.com
Rua General Carneiro, 460, 11° andar, Curitiba,
Paraná, Brazil, 80060-150.