1 Introduction

1.1 The nominal system in Brazilian Portuguese

Brazilian Portuguese (BrP) has a rich noun phrase system, which grammatically distinguishes between mass and count nouns, and between singular and plural. Mass nouns - ‘farinha’ (flour) in (1a) - cannot be counted and do not combine with the plural morpheme, whereas ‘menina’ (girl) is countable and combines with the suffix ‘-s’ to indicate plurality (1b). The absence of morphological mark, in (1c), is interpreted as a null morpheme that expresses singularity, as in Müller (2002):

(1) a. *Dua-s farinha-s\(^1\)
   two-PL flour-PL
b. Dua-s menina-s
   two-PL girl-PL
c. Uma menina
   A/One girl-SG

It is probably the absence of the plural morpheme that named the noun phrase ‘menina’ (girl) in (2a) bare singular, in contrast with the bare plural, in (2b):

(2) a. Menina brinc-a de boneca.
   girl play-PRS.3SG of doll.
b. Menina-s brinca- de boneca.
   girl-PL play-PRS.3PL of doll.

\(^1\) The glosses follow the Leipzig Glossing Rules available at http://www.eva.mpg.de/lingua/resources/glossing-rules.php
However, it is misleading to call the noun phrase in (2a) singular. As has been pointed out since the first descriptions of the bare noun phrases in BrP, ‘menina’ (girl) in (2a) is not semantically singular; in fact, it may be recovered by a plural pronoun as shown by Schmitt & Munn (1999). This is the reason why these authors, among others, claim that the so-called Bare Singular is in fact number neutral. Thus, it seems at first sight that BrP has singular, plural, and number neutral count nouns, besides mass nouns. Indeed this is the suggestion found both in Müller (2004) who uses the label Number Neutral Noun for the so-called Bare Singular and in Dobrovie-Sorin (2010), who names it Number Neutral Count Noun. Just for convenience we shall use the label Bare Singular. However, Pires de Oliveira & Rothstein’s (2011) show that the Bare Singular is not number neutral; they advance the hypothesis that it is always kind denoting. This paper gives further support to their claim that the Bare Singular is not number neutral and that it is always kind denoting even when in subject position of episodic predicates, our aim concern.

1.2 The data

Since the first approaches to the Bare Singular in BrP – Saraiva (1997), Schmitt & Munn (1999) and others – it has been noticed that it is degraded in subject position of episodic predicates. There is a contrast of felicity between (2a), a generic statement, and (3):

(3) # Ontem, menina brinc-ou de boneca.
    Yesterday, girl play-PST.PRF.3SG of doll

Both Saraiva and Müller claim that (3) is ungrammatical, whereas Schmitt & Munn consider that it requires particular contexts of use. Thus, there is disagreement concerning the grammatical status of the Bare Singular in subject position of episodic predicates; we shall argue that the sequence in (3) is grammatical and clarify which context licenses it.

The Bare Plural, on the other hand, happens naturally as subject of episodic predicates. The sentence in (4) does not need a particular context of interpretation:

(4) Ontem, menina-s brinca-ram de boneca.
    yesterday, girl-PL play-PST.PRF.3PL of doll

The first generation of authors who analyzed bare nouns in BrP paid little attention to the object position, assuming that there were no constraints in such a position. Only recently, it has been shown (Pires de Oliveira & Rothstein (2011), Donazzan & Gritti (2011)) that there is the same a constraint blocking the Bare Singular in object position of some verbal heads when they are episodic – (5a) does not naturally report an event, whereas (5b) does:

(5) a. # João ganh-ou corrida ontem.
    João win-PST.PRF.3SG race yesterday
b. João ganh-ou corrida-s ontem.
    João win-PST.PRF.3SG race-PL yesterday
In this paper our focus is the subject position, thus we want to explain contrast between (3) and (4), although as conclusion we shall say some words about the contrast in (5).²

1.3 An outline of the paper

Our aims are: (i) to explain why the Bare Singular is not always natural in the subject position of episodic predicates, (ii) to clarify licensing contexts, (iii) to explain the contrast between the Bare Singular and the Bare Plural. We develop the hypothesis that these facts follow from Pires de Oliveira & Rothstein’s (2011) claim that the Bare Singular, but not the Bare Plural, is always kind denoting.

Bare nouns in BrP were analyzed as names of kinds, as indefinites, or as ambiguous between the two approaches. Schmitt & Munn (1999), among others, understand that bare nouns in BrP are names of kind, and explain their occurrence in episodic contexts by applying D(erived) K(ind) P(redication) (Chierchia (1988)). Müller (2002) takes bare nouns to be indefinites, and Dobrovie-Sorin (2010) claims that the Bare Singular is ambiguous; it is a name of kind in subject position and an indefinite in object position. Müller cannot endorse the ambiguity view, because, in disagreement with several authors (Saraiva (1998), Schmitt & Munn (1999) and others), she judges the sentence in (6) to be ungrammatical:

(6) Dinossauro está extinto.

dinosaur be.PRS.3SG extinct.PTCP

Despite their theoretical disagreements, all these approaches consider that the Bare Singular is Number Neutral.³ In the second section, we show that this cannot be the case. That both the classical kind view and the indefinite approach lead to incorrect predictions concerning the Bare Singular in BrP. In the third section we present Pires de Oliveira & Rothstein’s view that the Bare Singular is always a name of kind. The radical position, according to which there are no type shift operations that allow for instantiations of the kind, follows Landman & Rothstein’s (2010) proposal for understanding how kinds are related to individuals. We extend their approach to account for the Bare Singular in subject position of episodic predicates.

2 The number neutral view

Although the kind view was the first to appear in the literature – Munn & Schmitt (1999) -, we review the theories starting with the indefinite approach, proposed by Müller (2002). The reason for this is that the approach we develop also claims that the Bare Singular is a name of kind, though in a radical way.

2.1 The indefinite approach

Müller (2004) claims that bare nouns in BrP are indefinites in Heim’s sense (1982), i.e. they introduce a variable that is free to be bound by different operators. If this were the whole story, then one would expect the sentence in (3) to be grammatical, and to have an existential interpretation, since it is about a particular event. The sentence in (3) should convey that there

² See Pires de Oliveira & Rothstein (in preparation) for an analysis of the object position.
³ Expect from Saraiva (1997) who considers the Bare Singular to be a universal. We will not discuss this approach.
was an event of playing with dolls the agent of which was some girl(s) or other. However Müller (2004) claims that sentence (3) is not grammatical. When in subject position of an episodic predicate, the Bare Singular can only have generic interpretation. In order to block the combination of an episodic predicate with the Bare Singular, she argues that the Bare Singular is not in a truly subject position; the noun phrase in (3) is in fact above Inflectional Phrase – it is in a higher position. The author shows, via different syntactic tests, that the Bare Singular is in a topic position. In such a position, it cannot but be bound by the generic quantifier. Relying on Diesing’s mapping, the author claims the Bare Singular must move to the higher topic position, where it must be bounded by the generic operator. The idea is that the Bare Singular cannot remain inside IP because it is always a topic. But it is surprising that we have a structure that must be a topic, and this is certainly not the case for the Bare Singular. Moreover, there is no explanation for why this is so, why only the Bare Singular, but not the Bare Plural has this property. It is even more puzzling because the Bare Singular denotes as the Bare Plural, since both denote pluralities.

Be as it may, according to this approach, the sentence in (7) is fine, because it is closed by the generic operator, whereas sentence (8) is ungrammatical, because the noun phrase is forced to remain inside the IP, and must then be bound existentially:

(7) Judeu está fazendo jejum hoje.
    jew be.PRS.3SG do-GER fasting today

(8) * Menino está com fome.
    Boy be.PRS.3SG with hungry

Needless to say that one of the difficulties is the notion of (un)grammaticality itself. Though it is certainly the case that out of the blue the sentence in (8) is not natural, there are contexts where it may be used, as we will see in the last section. But, before dealing with this issue, let’s consider the interpretation of (7), since there is consensus that this is a grammatical sequence in BrP. Müller proposes that (7) has the following logical form:

(9) Gen (x;) [Jew (x); Fasting (x)]

To make things easier suppose that ‘today’ is the Yom Kippur day. As it stands such a logical form hides the issue about the denotation of the Bare Singular even if we consider it to be a predicate. Notice that if ‘judeu’ (Jew) is an atomic predicate, then we don’t expect that it is recovered by a plural pronoun. But contrary to this expectation, the plural pronoun is the best alternative:

(10) a. ??Ele guarda a lei judaica.
    He keep.PRS.3S the law jewish

b. Eles guarda-m a lei judaica.
    They keep.PRS-3P the law jewish.

As we have mentioned, in Müller (2002), the Bare Singular is described as denoting both atoms and pluralities, whereas the Bare Plural denotes only pluralities – the atoms are stripped off. Thus, let’s suppose that ‘judeu’ (Jew) denotes the number neutral lattice structure. If this is
indeed the case, then we expect the Bare Singular to have the same distribution as the Bare Plural, and also the same interpretation, since it is plural besides being singular. However, as shown by Pires de Oliveira & Rothstein (2011) this prediction is not fulfilled: the Bare Singular does not have the same distribution as the Bare Plural, as we saw: the Bare Plural combines naturally with episodic predicates, whereas the Bare Singular does not. Moreover, they do not have the same interpretation. The plural version of (7), in (11), could be interpreted as about sub-kinds of Jews — i.e. Jews from different traditions —, and it could have an existential interpretation, where only some Jews are fasting:

(11) Judeus estão fazendo jejun.
Jew-PL be.PRS.3PL do-GER fasting

None of these interpretations is available for (7). Why should this be so if the Bare Singular denotes pluralities as well as singularities as proposed by Müller?

Moreover the logical form in (9) says that in general, if one is a Jew, then one is fasting at Yom Kippur. But this is not what the sentence in (7) says. That sentence is not an inductive generalization about the behavior of particular individuals. If the truth conditions of (7) were as those in (9), then the sentence should be true only if fasting at Yom Kippur was a pattern of behavior of Jews. There is a lot of discussion about how many instances should be true to make a statement count as a pattern, so let’s be naïve and consider that ‘geralmente’ (generally), the open version of the generic operator, means that a contextually significant amount of Jews are fasting. But the sentence in (7) can be true even if only few Jews are fasting at Yom Kippur, because it is not a generalization, but the statement of a law.

Finally, Müller’s proposal predicts that the sentence below is either ungrammatical or has a generic interpretation. None of these is true:

(12) Ontem rato comeu a comida do cachorro.
Yesterday rat eat-PRF.3S the food of+the dog.

This is not a generic sentence, since the introduction of the generic adverb ‘geralmente’ (generally) engenders an infelicitous sequence. Moreover, Brazilians do use (12) to talk about a particular episode. Thus, (12) is grammatical. In fact, it is the natural way of reporting what happened. No doubt it is puzzling that sentence (8) is not out of the blue fine whereas sentence (12) is. We shall explain why this is so.

With respect to the object position, in Müller’s framework, one doesn’t expect any restrictions to the Bare Singular, since it is a number neutral predicate which may be bounded by different operators. Given that in (5a) the Bare Singular is in the internal object position, we expect it to have an existential interpretation. But if this is indeed the case, then how the contrast in (5) is to be explained? Why we do not get the interpretation that there was a race which was won by João? If one may explain the contrast between (3) and (4) by postulating that the Bare Singular must move to a position higher than IP, this cannot be the explanation for the contrast in (5).

2.2 The classical kind view

It is certainly the case that one can only suggest that bare nouns are names of kind if they can be arguments of kind predicates. This is the importance of the data in (6). If the Bare Singular is
ungrammatical with kind predicates, then we can be sure that they are not names of kind. But, different authors consider that the sentence in (6) is fine: Saraiva (1997), and Munn & Schmitt (1999) are examples. Pires de Oliveira et al. (2010) found data from corpora where the Bare Singular is the subject of a kind predicate; moreover, they conducted an experiment of evaluation which supports the claim that at least for some speakers of BrP the sentence in (6) is grammatical. We consider (6) to be grammatical. Suppose this is indeed the case, then the Bare Singular is a kind denoting term. Going back to Carlson’s (1977) insight that the English BP denotes the kind, Schmitt & Munn, Munn & Schmitt among others argue that the Bare Singular is built by the down operator, as suggested by Chierchia (1998) for the Bare Plural in English. The same idea appears in Dobrovie-sorin & Pires de Oliveira (2010).

Thought Munn & Schmitt (2004), among others, claim that the Bare Singular is marked when in subject position of episodic predicates, as exemplified in (13), they do not explain why this is the case (the following example is example (6b) in Schmitt & Munn (2002)):

(13) ?? Mulher discutiu a-s eleiçõ-es.
    woman discuss-PST.PRF.3SG the-PL election-PL.

They claim that “in subject position of strongly episodic sentences bare singulars are somewhat degraded” (Schmitt & Munn, 1999), though they are compatible with true kind predicates, even if temporally located: “true kind predications are actually compatible with temporally located eventualities without focus reading” (Munn & Schmitt 2002), as exemplified below:

(14) Na década de 70, relógio digital passou a ser fabricado em Manaus.
    In the decade of 70, watch digital pass-PST.PRF.3SG to be.INF fabricate-PTCP
    in Manaus

The authors point out that the infelicity of the combination of the Bare Singular with, what they call, “strong” episodic predicates disappears when we have focus, example (15), when they are in the scope of a focus term, (16), and when they are in a list context, (17):

(15) MULHER discutiu a-s eleiçõ-es.
    woman discuss-PST.PRF.3SG the-PL election-PL.

(16) Só mulher discutiu a-s eleiçõ-es.
    Only woman discuss-PST.PRF.3SG the-PL election-PL.

(17) Mulher discutiu a-s eleiçõ-es, homem discutiu futebol.
    woman discuss-PST.PRF.3SG the-PL election-PL, man discuss-PST.PRF.3SG soccer.

Thought they correctly point to the infelicity of combining the Bare Singular with an episodic predicate, and the different mechanisms for rescuing the construction, they have no explanation for the infelicity nor for the role of mechanisms. What is the role of focus? What is the list context doing? We shall answer these questions in the next section.

As already said, they assume Chierchia’s (1998) proposal for the English Bare Plural according to which the down operator applies and returns the maximal intensional individual, i.e.
the kind. Moreover, when it combines with stage level predicates, the kind is upped to its instantiations and there is existential closure – the famous D(erived) K(ind) P(redication) applies. This is indeed Chierchia’s explanation for the existential interpretation of sentences such as:

(18) Dogs are barking.

Munn & Schmitt assume Chierchia’s DPK to explain the existential uses of bare nouns without realizing that if this were the case then we expect their sentence in (13) to be as natural as (18) is. Moreover we expect it to have the same existential interpretation. The reason is clear: the down operator applies and the result is the kind, to which DPK applies and returns the assertion that there are instantiations of that kind. Thus, the prediction is that sentence (13) should mean: there was at least one woman who discussed politics. This is a pretty straightforward meaning, but it is not what the sentence in (13) means. The truth of (13) entails that some women discussed politics, but from the assertion that some women discussed politics one cannot infer (13). Thus, (13) is not synonymous of some women discussed politics.

Moreover, there is no explanation for the need of focus. Nor why in some cases, as in (12) there is no need of focus even if the predicate is not a kind predicate. Answers to these questions cannot be found in their approach.

Their proposal is not better than Müller’s with respect to the object position: it predicts that the Bare Singular can always get an existential interpretation. But then how do we explain (5a)?

3 The radical kind view

As a summary, let’s review the data to be explained: (i) the Bare Singular is sometimes infelicitous when in subject position of an episodic predicate, as exemplified in (3), (8) and (13); (ii) however this is not always the case; (12) shows the combination can be felicitous even if the predicate is not about the kind; (iii) focus, and list are ways of increasing the felicity of the Bare Singular in episodic sentence; (iv) there is a contrast between the Bare Singular and the Bare Plural; finally, (v) the interpretation of sentences such as (12), or those from (15) to (17), an issue that was not discussed in the literature yet; we claimed that sentences with the Bare Singular are not synonymous of existential sentences.

Pires de Oliveira & Rothstein (2011) suggest that the data from (i) to (iii) follows from the kind interpretation of the Bare Singular. In this section, we show that this is indeed the case. Moreover this same hypothesis explains (iv) and gives us the correct interpretation. The radical hypothesis is that the Bare Singular always denotes the kind, that is, there is no type shifting to instantiations. This hypothesis directly explains its combination with kind predicates, as in (6), and all its generic uses, which may be generated either by considering the distinction between gnomic and episodic predicates as in Landman & Rothstein (2010) or by generic quantification over instances of the kind relation. For the “strong” episodic interpretations, we also follow Landman & Rothstein’s (2010) proposal for the Bare Plural. They propose that the Bare Plural can always denote the kind, even when it is object of an episodic predicate as in:

4 Very briefly – for the details see Pires de Oliveira & Rothstein (2011): root nouns, type \( <e, t> \), denote lattice structures the atoms of which are vague (in Landman’s sense (2010). Brazilian Portuguese is a language that allows the count and the down operator to apply freely (differently from English, a count or down language. If the down operator applies we get a kind, type \( <s, e> \). If the count operation applies we get a singular predicate, type \( <e \times d, t> \), where there is a pairing of an individual and a sometimes contextually given unity.
According to their analysis, the sentence in (19) states that John entertained an episodic relation to the kind Apple. Their insight is the characterization of what a relation between an individual and a kind is. The sentence in (19) does not entail that there were apples that John ate, but rather that there was at least an event that can count as a witness of John having an eating relation with the kind Apple. Thus, (19) is true even if John ate apple pills as long as what happened can count as an event of apple eating. Notice that these are loose truth conditions.

This seems to be precisely what happens when one uses the Bare Singular in BrP: one wants to establish a relation to a kind or to attribute a certain property to a kind, based on enough relevant witness events. Let’s see this in more details.

If Derived Kind Predicate were to apply to sentence (12), which is felicitous without any need of focus or context, the interpretation would be: there was at least one rat that ate the dog’s food. Thus, it should be synonymous of the sentence:

(20) Algum rato com-eu a comida do cachorro.
Some rat eat-PST.PRF.3SG the food of+the dog.

But it is not. Although one may infer (20) from (12), the other way around is not the case, and they are not true in the same situations. From the event with kind agent one may infer episodic witness events, but from an episodic event the agent of which is an individual one cannot infer the participation of the kind in the event. Thus, they are not synonymous. Sentence (12) is true even if the speaker has an indirect indication that rats have eaten the dog’s food. Notice that if the sentence meant that there were rats who stole the dog’s food, the speaker could not truly assert sentence (12) given that she had only indirect evidence. In such a situation, strictly speaking sentence (20) is false. Thus, it is not that only a single rat can make (12) true, that would be the case if DKP applied, but rather that any single evidence of a rat makes it true, and this is ruled out by DKP, since it asserts that there were rats involved in the event. Thus, the truth conditions of (12) are very loose, because the agent of the event is a kind: the sentence is true if there is enough evidence of the participation of the kind in the event. But what count as enough evidence remains open to discussion and the semantics cannot say anything about it. This is the importance of the notion of witness in Landman & Rothstein (2010): an event involving the kind either as subject or as object requires the realization of some event that can count as witness.

Thus, if we suppose Pires de Oliveira & Rothstein (2011) are right and the Bare Singular always denotes the kind, we may apprehend correctly the truth conditions of sentence (12). We can also explain why the sentence in (13) is infelicitous out-of-the-blue. The predicate ‘discutiu política’ (discussed politics) is an episodic predicate in Carlson’s sense: it is about stages of an individual. Thus, it is not normally a temporally located predicate of a kind. The sentence asserts that there was a total or complete event of discussing politics with the woman-kind as its agent. But this is normally a bizarre assertion since it is difficult to see what such a total event involving the kind could be. This is the explanation for the infelicity of the sentences presented above, (3), (8) and (13). Their infelicity comes from their semantics, which imposes the kind as the agent of an episodic predicate normally attributed to individuals.

Bare Singulars are licensed when the context allows one to interpret the predicate as a predicate of kinds and they are otherwise infelicitous. Focus and lists are contexts which license one to interpret the predicate as a predicate of the kind. Sentences from (15) to (17) are
acceptable because these are contexts where the sentences can naturally be taken as assertions about the woman-kind participating in a complete event: in the context of the party, there was a bounded event of discussing politics which the woman-kind (relative to the party) participated in, while the man-kind did something else. Only the woman-kind participated in the event of discussing politics. The woman-kind but no other kinds participated in the event of discussing politics. In all the examples, the appropriate alternatives are always kinds. Notice, moreover, that if a kind context is created, then one may utter (13) felicitously. This happens when the speaker wants to convey that what she is reporting is something extraordinary, something that can count for the kind, where the individual that performed the event is taken to be the representative of the kind. If normally women do not discuss politics, but in the party this happened, then this is an extraordinary fact can count as a property of the kind. Thus, the fact that women discussed politics in the party is presented linguistically as an event that counts for the kind. Choosing the Bare Singular, the speaker imposes a certain perspective on the event: the event is described as an event of the kind. Prosodic prominence and list are ways of foregrounding the kind interpretation.

Recall that the bare noun system in BrP is complete, as we saw in section 1.1. Thus, a speaker who chooses to report such and such a situation using the Bare Singular – and not the indefinite nor the definite articles, nor the bare plural – is committing herself to the assertion that what happened in the world is to be taken as an event of the kind. No doubt this can only happen if what is reported is considered to be something extraordinary, something that is not only true of the individual as such but that is true of the individual as a representative of the kind. This is precisely the case with sentence in (12), what one is reporting is an unexpected event. Since per se the appearance of rats in our urban contemporary society is something considered to be unusual, we understand why the sentence is felicitous even without focus.

Consider the sentence below, which, out of the blue, is infelicitous, because, as we said, normally it is weird to attribute to the kind a complete event of writing a letter:

(21) Menino escrev-eu carta.
Boy write-PST.PERF.3S letter

Here is a context where it is natural. Suppose the speaker is describing how successful the protest campaign she is running was. By uttering (21), she asserts that there were events of the kind boy taking part in the campaign, without making any specific claim about how many or how general these events were. But they count as event of the kind. Thus they are not ordinary events. This is the reason why she chooses to report what happened by using the Bare Singular.

We briefly pointed out that the Bare Plural is always felicitous with perfective predicates. This is a clear indication that it is not specialized for kind denoting. Cases like (4) can, then, be explained by existential closure, because it may be interpreted as about some girls who played with dolls. The kind interpretation is also available, but we do not get the extraordinary reading. These are all indications that the Bare Plural in BrP seems to be a plural predicate which may be bound by different operators as proposed by Pires de Oliveira & Rothstein (2011).

4 Conclusion

We have shown that the Bare Singular is not number neutral, in the sense that it denotes atoms and pluralities, because if it were so, we do not expect it to contrast with the Bare Plural, in particular in object position. Both should be fine. The contrast is explained if the Bare Singular
always denotes the kind, and the Bare Plural is a plural predicate. The infelicity of the Bare Singular with episodic predicates is due to the fact that normally we do not ascribe a complete event to the kind. But Bare Singulars are licensed when the context allows one to interpret the predicate as a predicate of kinds and they are otherwise infelicitous. The constraint does not apply to the Bare Plural because it is a plural predicate. Moreover, we cannot account for the truth conditions of the Bare Singular in subject position of episodic predicates if we allow type shifting operations as DKP, because it gives us the wrong interpretation. Thus, it seems that we are better off assuming the radical hypothesis according to which the Bare Singular is always kind denoting.

References


Donazzan, Marta; Letícia Gritti. 2011. Bare nouns, episodic events and event types: explaining perfective VPs. Manuscript.


Landman, Fred. 2009. On the mass-count distinction. [http://www.tau.ac.il/~landman/online-papers.html](http://www.tau.ac.il/~landman/online-papers.html)


Pires de Oliveira, Roberta; Susan Rothstein. 2011. Bare singular noun phrases are mass in Brazilian Portuguese. *Lingua* 121, 2153-2175.

----- in preparation. Bare objects in Brazilian Portuguese.


Schmitt, Cristina; Alan Munn. 1999. Against the nominal mapping parameter: bare nouns in Brazilian Portuguese. *Proceedings of NELS* 29, 339-353

----- 2002. The syntax and semantics of bare arguments in Brazilian Portuguese. *Linguistic Variation Yearbook*, vol. 2, number 1, 185-216