

The main goal of the talk will be to elucidate the notion of ‘number neutrality’ in such a way that we can account for several important contrasts between bare plurals (BPs) and numberneutral bare singulars (BSs). The analysis bears on Brazilian Portuguese (BrP), but it is assumed to generalize – modulo parametric variation of various sorts - across languages (even to those languages that have only number-neutral BSs, e.g., Chinese, or only existential BPs, e.g., Romance languages). In this presentation I will leave aside the analysis of BSs in Romance languages such as Spanish, Romanian and Catalan (see Dobrovie-Sorin, Blean & Espinal (2006)).

1. Contrasts between BSs and BPs

(i) *Dependent Plural Readings*. Partee (1985) observed that English bare plurals are threeway ambiguous when they occur in an opaque context which is itself embedded under a plural DP:

- (1) All the schoolboys want to meet policemen.
- a. ‘for each schoolboy there is a policeman such that he wants to meet him’.
 - b. ‘each schoolboy is such that he wants to meet a policeman’.
 - c. ‘each schoolboy is such that he wants to meet policemen’.

The reading in (1)c is the one that is predicted by Carlson’s (1977) analysis of BPs, whereas those in (1)a-b rely on the BP functioning as a ‘dependent plural’, i.e., as a DP that owes its plurality not to its interpretation (note that *singular* indefinites appears in the glosses of (1)ab) but rather to the fact that it depends on a plural DP (here, the subject DP). Exactly like in sentences built with singular indefinites in object positions, the BP in (1) is ambiguous between a transparent and an opaque reading, as in (1)a and (1)b, respectively. Schmitt & Munn (2002) observed that the BrP bare plural in (3a) behaves like the English one, allowing three readings, whereas the bare singular in (3b) only has the narrow scope reading corresponding to (1)c:

- (2) a. Os alunos estão procurando artigos de linguística para apresentar
the students are looking-for articles of linguistics to present
“The students are looking for linguistics articles to present.”
- b. Os alunos estão procurando artigo de linguística para apresentar.
the students are looking-for article of linguistics to present
“The students are looking for linguistics articles to present.”

The fact that BSs lack the ‘dependent plural’ effect illustrated in (2)a for BPs is problematic for those analyses (e.g., Müller (2002)) that assume that number-neutral BSs have both atoms and pluralities in their domain of denotation.

(ii) *Quasi-universal and strong existential readings*. Condoravdi (1992, 1994) observed that bare NPs (BNs henceforth) allow a ‘functional’ reading (relabelled ‘quasiuniversal’ by Dobrovie-Sorin & Laca (1996), Dobrovie-Sorin (1997)), which is clearly distinct from both the generic and the existential readings. On this third construal, BNs refer to the totality of the contextually relevant entities that satisfy the descriptive content of the BN. Condoravdi argues that in episodic contexts, examples such as (3) are ambiguous between the existential and the quasi-universal reading. On the latter reading, BNs are

in free variation with definite plurals and are translatable by definite plurals in Romance languages:

- (3) a. Linguistic theories have posited abstract representations.
- b. Rescue teams have rescued 28,950 victims.
- c. Prices went up today.

BPs in BrP behave on a par with BPs in English. BSs, on the other hand, allow the quasiuniversal reading, but not the existential reading :

- (4) a. Alunos no ano passado fizeram greve. (ambiguous)
 ‘Students last year went on strike.’
- b. Aluno no ano passado fez greve. (quasi-universal reading only)
 ‘Student last year went on strike.’

2. Furniture. Mass nouns, see *furniture*-type nouns in particular, behave on a par with number-neutral BSs (since mass nouns behave in the same way in BrP and English, I illustrate with English examples). Thus, poetry and furniture can take only narrow scope in (5)a-b, and only the quasi-universal reading in (6)a-b:

- (5) a. All the schoolboys want to read poetry during the school-party.
- b. All my friends want to buy furniture.
- (6) a. Milk went up today.
- b. Furniture went up today.

3. Number Neutral Bare Singulars are cumulative but not plural. My proposal will build on the observation we just made, that number-neutral BSs behave like *furniture*-type nouns. I will argue in favor of a revised version of Chierchia’s (1998) analysis of number-neutral BSs (see in particular Chinese and BrP). Although I agree with Chierchia’s (1998) view that *number-neutral BSs* are to be treated on a par with *mass BNs* (note however that this does not mean that mass and count nouns are identical *lexical* classes; it is only their *syntactic* behavior that is identical), I crucially depart from Chierchia’s analysis of mass nouns, as ‘lexically pluralized’. Mass BNs resemble pluralities in that they are cumulative, but crucially differ from pluralities in that they do not arise via pluralization. In short, whereas Chierchia identifies the notions of cumulativity and plurality, they are kept distinct under my account: plurality and ‘mass’ are distinct types of cumulative reference, and it is precisely this distinction that will help us account for the contrasts enumerated above between numberneutral BSs and BPs. A pluralized predicate is obtained by applying the star-operator to a singular predicate (Link (1983), Landman (2000)), yielding the closure under sum of the set denoted by the singular predicate, i.e., a set that contains, in addition to the set of atoms denoted by the singular predicate, all the pluralities generated by sum-formation. The domain of mass nouns, on the other hand, is not derived via the pluralization of an atomic predicate, which means that mass-entities (think about undifferentiated amounts of matter, e.g., amounts of butter, sand, bread, or furniture, jewelry, etc.) are *neither atomic nor plural*. (compare most of the current accounts (e.g., Müller (2002)), which assume that number-neutral domains contain *both atoms and pluralities*). To take an example, I assume that individual poems and pluralities thereof are part of the denotation of the plural noun *poems* but not part of the denotation of the *mass* noun *poetry* in English, nor part of the denotation of the BS *poesia* in Brazilian Portuguese; *poetry* and *poesia* denote properties that refer to undifferentiated amounts of poetry, rather than sets that contain both atomic poems and sums of poems; it is the lexical relation between *poetry* and *poem(s)* that explains why *poetry* can refer to atomic poems (I distinguish between ‘referring to’ and ‘denoting’).

4. Analysis. I will propose that ‘dependent plurals’ rely on a dependency relation implemented in terms of Skolem terms (Steedman (2006)), which allows them to escape

opacity contexts (the ‘intermediate readings’ of indefinites have been independently argued to arise via Skolemization (see Steedman’s (2006) restatement of Kratzer’s (1998) account)). Number-neutral BSs cannot be interpreted as dependent plurals (and therefore they can only be interpreted as narrow-scoped wrt intensional operators) because they denote cumulative properties, which cannot be extensionalized as sets (but only as lattice-structures) and therefore they cannot provide legitimate co-domains for functions. The same reasoning applies to mass nouns (see examples (5)a-b). Turning now to the lack of the existential reading in (4)b and (6)a-b, I will argue that in examples of this type, a *strong* existential reading is forced, which is available for BPs (because they are pluralities (in Milsark’s (1977) obtained from atoms by pluralization) but not for mass nouns or number-neutral BSs, which can only take *weak* existential readings.

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