<center>**Amounts of Objects and Pluralities**</center>

1. Singular Descriptions and Cumulative Reference. Brazilian Portuguese allows count bare NPs (CBNs) in argument positions (Schmitt and Munn 1999, inter alia). CBNs are morphologically unmarked, but semantically number neutral. They carry no plural morphology, but can be resumed by plural anaphoric pronouns at the discourse level:

(3)   Maria comprou CD na Fnac. Eles estão no carro.
        Mary bought   CD at Fnac they are in-the car
        `Mary bought CDs at Fnac. They are in her car'.

The crucial data (due to Ferreira (2010)) that we discuss is related to how CBNs behave with respect to some instances of plurality-seeking predication. Consider, for instance, (4) and (5):

(4)   Eu vi aluno se cumprimentando.
        I saw student SE greeting
        'I saw students greeting themselves/each other'.

(5)   a.   Eu vi aluno que estava se cumprimentando.
               I saw student that was SE greeting
               'I saw students who were greeting themselves.
        b.   Eu vi alunos que estavam se cumprimentando.
               I saw students that were SE greeting
               'I saw students who were greeting themselves/each other.'

The crucial observation is that (4) is ambiguous, allowing both a reflexive and a reciprocal reading, whereas (5a), built with a relative clause containing an inflected verb marked as singular, blocks the reciprocal reading; compare (5b), built with a BP and a verb marked as plural, which allows the reciprocal reading. These data suggest the singular number marking on the verb of the relative clause induces a singular interpretation of the CBNs in (5a). Nevertheless, the CBN in (5a) is naturally resumed by a plural pronoun. Not only (4) and (5b), but also (5a) can be followed by a sentence such as *they looked crazy*.

       To account for this somewhat paradoxical situation, in which CBNs that seem to refer to (quantify over) atomic individuals are resumed by plural pronouns, we propose a solution that distinguishes between predicates of entities (NP-level) and the cardinality/measuring of entities (higher up).

(6)   *Syntactic Analysis of (5a)*
        [$_{DP}$[$_D$ Ø] [$_{QntP}$ [$_{Qnt}$ Ø] [$_{NP}$ [$_{CBN}$ student] [$_{relative\ clause}$ ... was SE-greeting ...]]]]
        NP is a predicate of atomic entities; QntP is a cumulative predicate

Given that the verb in the relative clause is singular, the reciprocal reading of SE is filtered out and the relative clause is interpreted as a predicate of atoms. Since the relative clause and the CBN combine intersectively, we end up with a NP denoting a set of atoms. Qnt turns sets of atoms into sets of amounts that are characterized by the atomic property described by the NP, namely over amounts of atomic individuals each of which is greeting himself/herself. Finally, Det denotes a choice function that selects an element of the QntP denotation.

2. Amounts and Pluralities

But what are amounts? We propose that amounts should not be equated with individuals and

that the denotation of CBNs is not the closure under sum formation of a set of atoms, that is, bare nominals are not like bare plurals. Our motivation is the following: Dayal (2007) observed in relation to Hindi and Hungarian that certain plurality-selecting verbs, e.g., *compare*, allow BPs but do not allow number-neutral CBNs, in contrast with other plurality-selecting verbs, e.g., *collect*, which allow both BPs and CBNs. The contrast between CBNs and BPs seems to also hold in Brazilian Portuguese:

(7) a. João coleciona selo.   b. João coleciona selos.
      João collects stamp   João collects stamps

(8) a. ?? João compara selo.   b. João compara selos
      João compares stamp   João compares stamps

Our proposal is that *compare* **(**other verbs like compare: *to enumerate, to list, to mix ...)* imposes a distinctness condition on its plural argument. Such a distinctness condition has been discussed in relation with the difference between collective terms vs plural terms (see Moltmann 1997):

(9) a.   *John compares this family.   (also *enumerate, list*, etc.)
     b.   John compares the members of this family.

The unacceptability of (8a) can be analyzed, on a par with that of (9a), as being due to a violation of the distinctness condition imposed by *compare*. Our proposal is that (i) the distinctness constraint can only be satisfied by plurality-referring terms, obtained via Link's pluralization operator. Bare plurals as well as plural definite DPs denote plural individuals (generated from a set of atoms) and as such they satisfy the distinctness condition imposed by *compare*-type predicates. CBNs on the other hand denote amounts of individuals, which are not obtained via pluralization, and as such are not good arguments for *compare*-type predicates.

     More concretely: in a universe with three cats, $[[cat+sg]] = \{c1, c2, c3\}$ and $[[cat+pl]] = \{c1, c2, c3, c1+c2, c1+c3, c2+c3, c1+c2+c3\}$. When it comes to amounts, c1 would not be different from c2, they would both count as "amounts of cat" perceived as having one minimal part (cat-unit). More generally, the distinction between c1, c2, and c3 is blurred and all we have now can be represented as c#. Likewise, c1+c2 would not be different from c2+c3, for instance, both being amounts of cat perceived as having two minimal parts (cat-unit). More generally, the distinction between c1+c2, c1+c3, c2+c3 would be blurred and we now have c##. Finally, instead of c1+c2+c3, we have c###. We assume that the silent head Quant is a function that turns sets of individuals into sets of amounts: [Quant [$_{NP}$ cat]] = \{c#, c##, c###\}.

     Our conclusion is that number neutrality should be kept distinct from inclusive plurality and that number-neutral CBNs refer to **amounts of individuals.** Since the entities that make up an amount are not identifiable/distinguishable, the atoms are not retrievable/accessible from a CBN denotation.

Selected References: Dayal, Veneeta 2004, Number marking and (in)definiteness in kind terms. L&P 27; Ferreira, Marcelo. 2010. The Morpho-Semantics of Number in Brazilian Portuguese Bare Singulars. Journal of Portuguese Linguistics; Schmitt, Cristina and Munn, Alan 1999. Against the Nominal Mapping Parameter: Bare nouns in Brazilian Portuguese. Proceedings of NELS 29