

On reference to kinds in Spanish and Russian.

1. A central topic in the literature on genericity is how different types of languages refer to kinds. A well-established assumption, since Carlson (1977/1980), is that bare plurals (BPs) in English (E) allow for a generic use, a reading that arises because BPs are taken to denote a particular type of entity: names of kinds of things. This view reflects the fact that BPs in E may occur as arguments of generic sentences (with kind-level and individual-level predicates). However, a still unresolved and poorly understood phenomenon is the question why E also allows the use of definite generics, as pointed out by Carlson (1977/1980:274-280) and Chierchia (1998:379-383):

- (1) a. *The owl* is common/widespread/fast disappearing/often intelligent (Carlson 1977/1980:276, (32a))
 b. *Owls* are common/widespread/fast disappearing/often intelligent (Carlson 1977/1980:276, (32b))

In this paper we will challenge the standard assumption that the generic or kind reading for NPs is modeled over pluralities (Chierchia 1998). Instead, we will defend the hypothesis that kinds are referred to by definite DPs with no Number projection. We will provide empirical support for this hypothesis based on a contrastive analysis of two languages that show opposite strategies for marking definiteness: Spanish (S), a Romance language with articles, which does not allow for generic BPs (Laca 1990; Dobrovie-Sorin and Laca 1996, 2003), and Russian (R), a Slavic language with no article.

2. We assume that nominal expressions denote properties of kinds (Espinal 2010, Espinal and McNally 2011). With this assumption in mind, our main theoretical **claim** is that a definite determiner, standardly interpreted as the iota operator ι , is responsible for instantiating a kind-denoting expression if and only if, it applies directly to a Noun. Crucially, no Number projection is involved in the syntactic structure paired with a kind interpretation.

Number is assumed to correspond to Carlson's realization relation R , relating properties of kinds to properties of objects of that kind (cf. Déprez 2005). In the case of singular Number it gives the singular property; in the case of plural Number it gives a plural property. We therefore claim that the difference between two types of entities, kinds and objects, initially postulated by Carlson, is morphosyntactically encoded.

The **iota operator** has a uniform semantics and applies either to properties of kinds (2a) or to properties of objects of this kind (2b). Neither a distinction between *nom* and ι (Partee 1987), nor the down operator (Chierchia 1998) is required to license a kind interpretation under this analysis.

- (2) a. $[_{DP} D [_{NP} N]]$ a'. $D N = \iota x^k [P(x^k)]$ a". $\langle e^k \rangle$ kind denotation
 b. $[_{DP} D [_{NumP} Num [_{NP} N]]$ b'. $D Num N = \iota x^o [P(x^k) \wedge R(P(x^o), P(x^k))]$ b". $\langle e^o \rangle$ object denotation

As for **predicates**, we assume the following typology: (i) kind-level predicates select for $\langle e^k \rangle$ arguments, (ii) individual-level predicates may select for $\langle e^k \rangle$ or $\langle e^o \rangle$, and (iii) stage-level predicates only select for $\langle e^o \rangle$. A model based on this predicate typology predicts the possibility to use a kind-referring definite NP with k-level and i-level predicates. However, a s-level predicate makes it impossible to interpret the subject DP as a kind. In order to make a generic statement with a s-level predicate the sentential operator GEN is required (Krifka et al. 1995).

3. This model straightforwardly accounts for the S data in (3). A kind-denoting subject is allowed with both k- and i-level predicates. If a singular definite DP subject is combined with an i-level or a s-level predicate, an existential interpretation is to be inferred.

- (3) a. El dodó se extinguió en el siglo XVII. k-level; $[_{DP} D [_{NP} N]]$
 the dodo CL extinguished in the century XVII
 'The dodo was extinct in the XVII century.'
 b. El dodó vivió en la isla Mauricio. i-level; $[_{DP} D [_{NP} N]]$ or $[_{DP} D [_{NumP} Num [_{NP} N]]$
 the dodo lived in the isle Mauritius
 'The dodo lived in Mauritius Island.'
 c. El dodó fue disecado en el Museo Ashmolean. s-level; $[_{DP} D [_{NumP} Num [_{NP} N]]$

the dodo was dissected in the museum Ashmolean
 ‘The dodo was dissected in the Ashmolean Museum.’

Our claim that there is no Number involved with the kind-referring DP subject is supported by the following piece of data:

- (4) La nevera se inventó / *Las (dos) neveras se inventaron en el siglo XVIII.
 The fridge CL invented.3sg/ *the (two) fridges CL invented.3pl in the century XVIII
 ‘The fridge was / *The (two) fridges were invented in the XVIII century’.

4. This analysis will be further extended to R. In the absence of an overt determiner this language allows the same interpretations as in S. The subject *dront* (dodo) is interpreted as referring to a kind in (5a), to either a kind or an individual object in (5b), and as an object with an existential interpretation in (5c). We will argue that the definite D is null, but still encodes the ι operator.

- (5) a. Dront ischez s lica zemli v XVII veke. k-level; [DPD [NP N]]
 dodo disappeared from surface of.earth in XVII century
 ‘The dodo was extinct in the XVII century.’
 b. Dront ne umel letat’. i-level; [DPD[NP N]] or [DPD[NumP Num[NP N]]]
 dodo not know.pst fly
 ‘The dodo could not fly.’
 c. Dront byl raschlenen v muzee Ashmola. s-level; [DPD[NumP Num[NP N]]]
 dodo was dissected in museum of.Ashmol
 ‘The dodo was dissected in the Ashmolean museum’.

Our claim that the interpretation of the subject in (5a) involves the ι operator (i.e. a covert definite article) is supported by the possibility to use an overt demonstrative pronoun only with the taxonomic (sub-kind) interpretation in (6a). Supporting evidence for the absence of a Number projection is given in (6b).

- (6) a. Etot dront ischez v XVII veke.
 this dodo disappeared in XVII century
 ‘This dodo disappeared in XVII century.’
 b. *Dva dronta ischezli v XVII veke
 two dodos disappeared in XVII century

5. This proposal, based on the general assumption that morphosyntax constrains semantic distinctions, and that the difference between object entities $\langle e^o \rangle$ and kind entities $\langle e^k \rangle$ relies on the presence or absence of a Number projection in the structure of nominal expressions, has several consequences with respect to how languages make reference to kinds.

First, in S (as in French; Beyssade 2005) and in R definite plural DPs in subject position of those predicates that select, or may select, for kinds are not to be interpreted as denoting kinds, rather the maximal sum of individuals that satisfy the property denoted by the N. Note that this DP allows universal quantification.

- (7) a. (Todos) los dodós se extinguieron ... / vivieron ...
 all the dodos CL extinguished lived
 b. (Vse) dinosavry ischezli s lica zemli / vymerli
 all dinosaurs disappeared.pl from surface of.earth died.out.pl

Second, we will explore the consequences of our analysis for the E data in (1) as well as for Brazilian Portuguese, a language that combines both the S and the R systems.

Selected references

- Beyssade, Claire (2005). Les définies génériques en français: noms d’espèces ou sommes maximales. In C. Dobrovie-Sorin (ed.), *Noms nus et généralité*. Paris: Presses Universitaires de Vincennes.
 Carlson, Greg (1977/1980). *Reference to kinds in English*. PhD dissertation Amsherst. New York: Garland.
 Chierchia, Gennaro (1998). Reference to kinds across languages. *Natural Language Semantics* 6.4, 339-405.
 Espinal, M. Teresa (2010). Bare nominals in Catalan and Spanish. Their structure and meaning. *Lingua* 120, 984-1009.