

Between Kinds and Properties: Bare Plurals Across Languages

Two major accounts of bare plurals (BPs) employ type-shifting. Chierchia (1998) proposes that BPs are basically properties, but are type-shifted to kinds. Additional type-shifting can then apply to get characterizing or existential readings. Krifka (2003) agrees that BPs are basically properties, but denies that type-shifting to kinds is necessary for either existential or characterizing readings. I take a middle ground, combining what I see as best in both approaches, and argue that kind reference is responsible for generic readings (characterizing as well as direct kind predication), though not for existential ones. Since English-based arguments are all too familiar, I will use evidence from Italian.

Italian BPs, just like English BPs, can receive narrow scope existential readings:

- (1) Non ho conosciuto belle ragazze (Chierchia 1998)
'I didn't meet beautiful girls'

Sentence (1) can only mean that the speaker didn't meet any beautiful girls, not that there are beautiful girls whom the speaker didn't meet.

What about reference to kinds? Chierchia argues that Italian BPs refer to kinds, using examples like the ones in (2). However, this evidence is far from conclusive, since predicates like *rare* ('rare') and *comuni* ('common') are arguably better analyzed as quantificational predicates rather than kind predicates (Krifka *et al.* 1995).

- (2) a. Qui, ragazze in minigonna sono rare.
'Here, girls in miniskirt are rare.'
b. Dopo il disastro nucleare, purtroppo, cani con difetti congeniti sono molto comuni.
'After the nuclear disaster, unfortunately, dogs with birth defects are very common.'

Longobardi (2001) points out that uncontroversial cases of kind predicates, such as *estinti* ('extinct') or *così chiamati* ('so-called'), are impossible with BPs:

- (3) a. *Elefanti di colore bianco sono estinti.
'White-colored elephants have become extinct.'
b. *Elefanti di colore bianco sono così chiamati per la pigmentazione della loro pelle.
'White-colored elephants are so-called because of the pigmentation of their skin.'

These data present a problem for Chierchia, since, according to him, if BPs cannot refer to kinds, they should not have existential readings. Krifka can account for these facts, since he does not require kind reference for existential readings. However, he does not require kind reference for characterizing readings either, hence would predict that characterizing readings of Italian BPs are freely available (with individual level predicates). But this is not the case, as demonstrated by the unacceptability of (4). And while Longobardi presents examples, such as (5a), of what appear to be characterizing generics, their distribution is severely restricted, as can be seen by the unacceptability of (5b).

- (4) *Linguisti sono bravi. (Chierchia 1998)
'Linguists are clever.'
(5) a. Cani da guardia di grosse dimensioni sono più efficienti/aggressivi.
'Watchdogs of large size are more efficient/aggressive.'
b. ??Cani da guardia di grosse dimensioni sono più pelosi/neri.
'Watchdogs of large size are hairier/blacker.'

In my account I propose, following both Chierchia and Krifka, that BPs are basically properties: the BP *dogs* is translated as the plural property **DOGS**. These properties can be type-shifted by Partee’s (1987) \exists operator, to receive an existential reading. Thus, the plural property **DOGS** is type shifted to $\lambda P\exists y[\mathbf{DOGS}(y) \wedge P(y)]$. Since type shifting is local, the resulting existential interpretation receives narrow scope only.

Alternatively, in a language like English, a BP can be type-shifted to denote a kind, using Chierchia’s \cap operator, which turns a property into a function from worlds to the maximum set in the denotation of the property in that world: $\lambda P\lambda s\iota P_s$. So, $\cap\mathbf{DOGS} = \lambda s\iota\mathbf{DOGS}_s$. The resulting sentence may be interpreted either as direct kind predication or, after the introduction of the generic quantifier and additional type-shifting by Chierchia’s \cup operator, as a characterizing generic, e.g. $\mathbf{gen}_x[\cup\cap\mathbf{DOGS}(x)][\mathbf{intelligent}(x)]$.

Following Dayal (2004), I suggest that in Italian, the definite determiner is ambiguous. It can have the interpretation it does in English, i.e. $\lambda P\iota P$, but also an intensional version of it: $\lambda P\lambda s\iota P_s$. Since this version of the definite is exactly the same as the type shifting operator \cap , by Chierchia’s Blocking Principle, such type-shifting cannot apply covertly in Italian. Consequently, BPs in Italian cannot refer to kinds. Since characterizing generic readings involve reference to kinds, there are no such readings in Italian.

Sentences like (5a) are not counterexamples to this claim since, on closer inspection, they turn out not to be characterizing generics at all, but rather statements that some norm is in effect. BPs in such Italian sentences behave similarly to English indefinite singulars, which also cannot denote kinds, and whose seemingly characterizing readings are severely restricted and are actually normative (Cohen 2001).

To conclude: in English and Italian (and universally?) BPs are properties. They can be type-shifted by \exists to receive existential readings, or, where permitted by the Blocking Principle, be type-shifted to kinds, to receive generic readings.

References

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