

Number Marking and Individuation: A View from Dagaare

The count/mass distinction is often related to a notion of individuation, designating a conceptual divide between objects (individuated and count) and substances (non-individuated and mass). In English, and many other languages, the count/mass divide aligns clearly with the capacity to accept plural marking. Here I present recent results from fieldwork I conducted on a radically different system—the inverse number marking system of Dagaare (Gur), wherein a single morpheme *-ri* sometimes marks the plural interpretation and sometimes the singular, depending on the noun. Systematic evaluation of the lexicon of Dagaare reveals that these markedness patterns in the count domain correlate to semantic distinctions of levels of individuation. These data contribute evidence that the influence of individuation as an organizing principle extends beyond the count/mass distinction and that the semantics associated with lexical items are relevant to number marking generally.

Inverse Number Marking in Dagaare: The number marking pattern of Dagaare is demonstrated by the near minimal pair below. Both nouns share the same stem, yet *-ri* marks the plural interpretation for ‘child’ and the singular interpretation for ‘seed’.

Singular	Plural	Stem	Gloss
bie	biiri	bi-	‘child’
biri	bie	bi-	‘seed’

The inverse marking pattern cannot be aligned with a mass/count distinction *tout court*: mass terms fall in a separate paradigm, combining with a distinct distributive plural marker *-nee* and singulative marker *-ruu*, depending on the noun.

Singulative	Mass	2nd Pl.	Gloss
—	kuo	konnee	‘water/ (types of) waters’
muoruu	muo	muonee	‘blade of grass/grass/grasses’

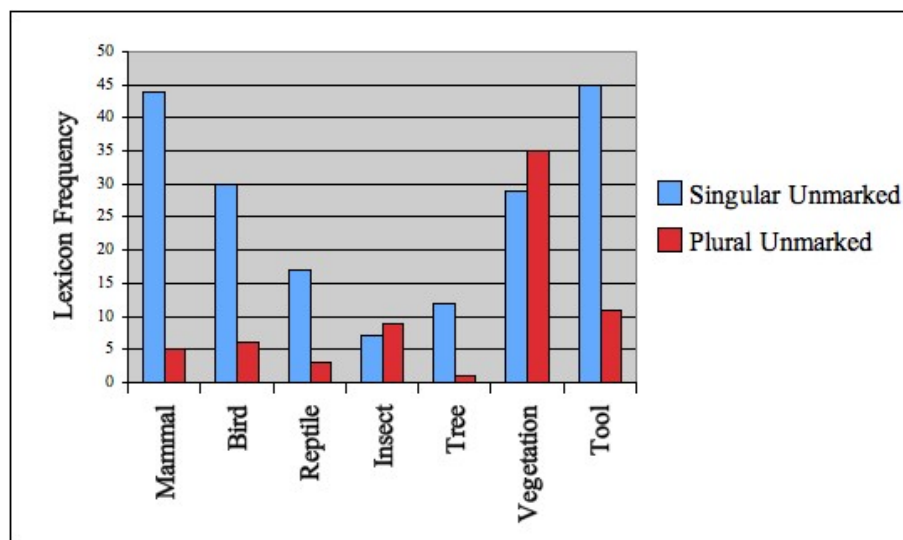
The analysis of *-ri* that I put forth here attributes lexical information to nouns, i.e. nouns come with a ‘basic’ number determined by the noun’s semantic properties. The application of *-ri* gives the inverse value. Schematically:

[Highly Individuated N] + *-ri* \Rightarrow plural

[Less Individuated/Inherently Plural N] + *-ri* \Rightarrow singular

The prediction, then, is that the more likely the entity is to be viewed as individuated, the more likely the singular will be unmarked and *-ri* will mark the plural, while the more likely the entity is to be viewed as coming in groups or non-individuated, the more likely the plural will be unmarked and *-ri* will mark the singular.

Validation Across Semantic Domains: If individuation has an effect on the distribution of *-ri*, one should observe distributional asymmetries in the appropriate semantic domains. For instance, larger (more salient) animals should be more likely to be unmarked in the singular than insects, as should trees in comparison to vegetation, and



tools should be more likely to be unmarked in singular, as they are canonically individuated inasmuch as we interact with them individually (see Wierzbicka 1988).

I validated this hypothesis on the lexicon assembled during my field research, which I coded for (relatively transparent) semantic domains. Shown in figure 1 are the lexicon tokens for the different domains, cross-classified by whether the unmarked form is singular or plural. As predicted, reliable asymmetries are visible across the semantic domains. In particular, higher level animates, trees and tools are typically unmarked in the singular, whereas insects and vegetation have a majority of nouns for which the plural is unmarked. Additionally, the nouns which do not conform to the general trend of the domain display semantic sub-regularities. For instance, most of the insects unmarked in the singular are those capable of causing harm (e.g. scorpion, wasp, spider).

Cross-Linguistic Outlook: Cross-linguistic correlates to the unmarked plural in Dagaare surface in an array of language types. Similar semantic domains are relevant for collectives and duals in a number of languages, e.g. Breton (see Acquaviva 2008), as well as for languages with nominal class systems, e.g. Swahili (Contini-Morava 2000). Despite different encodings, these systems all seem to make similar divisions along a scale of individuation. Increased attention to marked nominal types which lie in the middle region between highly individuated count and intrinsically mass terms promises insight both into conditions on cross-linguistic variation among number marking systems, as well as into the variation on the boundary between count and mass.

References:

- Acquaviva, Paolo. 2008. *Lexical Plurals: A morphosemantic approach*. Oxford.
- Contini-Morava, Ellen. 2000. Noun class as number in Swahili. In: *Between grammar and lexicon*. Ed. by E. Contini-Morava & Y. Tobin. John Benjamins, Amsterdam.
- Wierzbicka, Anna. 1988. *The semantics of grammar*. John Benjamins, Amsterdam.