Mass nouns, plurals, and mass plurals: on the Russian suffix *-ĭj-*

Ora Matushansky

SFL (CNRS/Université Paris-8/PLA)

The denotation of mass nouns

Landman 1989, 1991: mass nouns have no minimal parts
Landman 2011: their minimal parts are overlapping
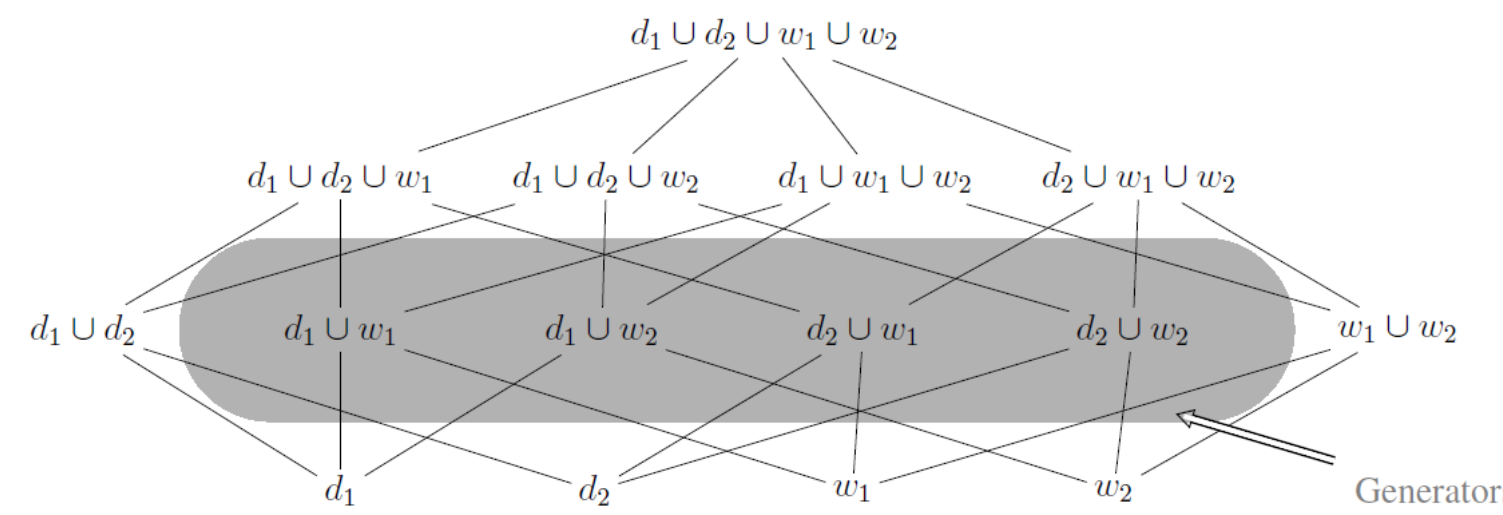
Sutton & Filip 2021:

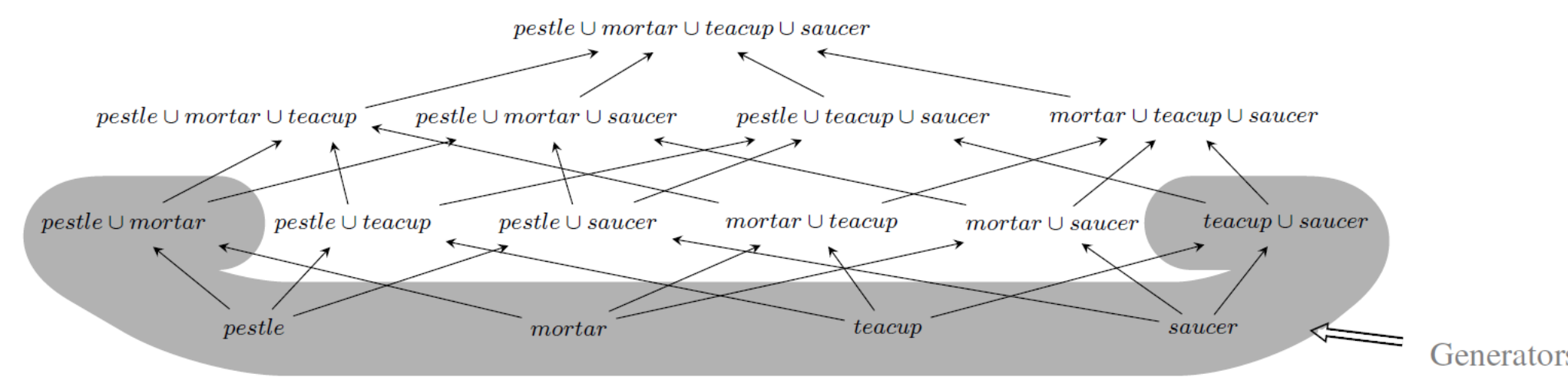Figure 1: Generators and minimal elements for *mud*

Figure 2: Generators for *kitchenware*

Chierchia 1998, 2010: their minimal parts are too vague to permit counting

Neat mass vs. plural encoding

Neat mass nouns and plurals share the same concept space, both intra-linguistically and cross-linguistically:

(1) a. *meubilair* 'furniture' (Dutch)
    b. *meubel* 'a piece of furniture.SG', *meubels* 'furniture.PL'   [Landman 2011]

(2) a. *linsen* 'lentils.PL' (German), *lentils* (English)
    b. *lešta* 'lentils.SG' (Bulgarian); *čočka* 'lentils.SG' (Czech)   [Sutton and Filip 2021]

Morphological plurality and mass

Both neat and mess mass nouns can be *pluralia tantum*:

(3) a. clothes, furnishings, groceries
    b. arrears, suds   [Acquaviva 2004]

Conversely, *pluralia tantum* can be count:

(4) a. *sani* 'sleigh.PL', *devčata* 'girls' (Russian)
    b. dv-oje   sanej
        two-COLL   sleigh.GEN
        'two sleighs'

Neat mass nouns and counting

Mass nouns cannot be counted (unless their denotation is changed):

(5) a. # five rices, *three pees
    b.   two beers
    c.   *five luggages, *three [snail] mails

Even when mass nouns denote concepts that have well-defined (minimal) units, like *mail* or *luggage* (neat mass nouns), they still cannot be counted
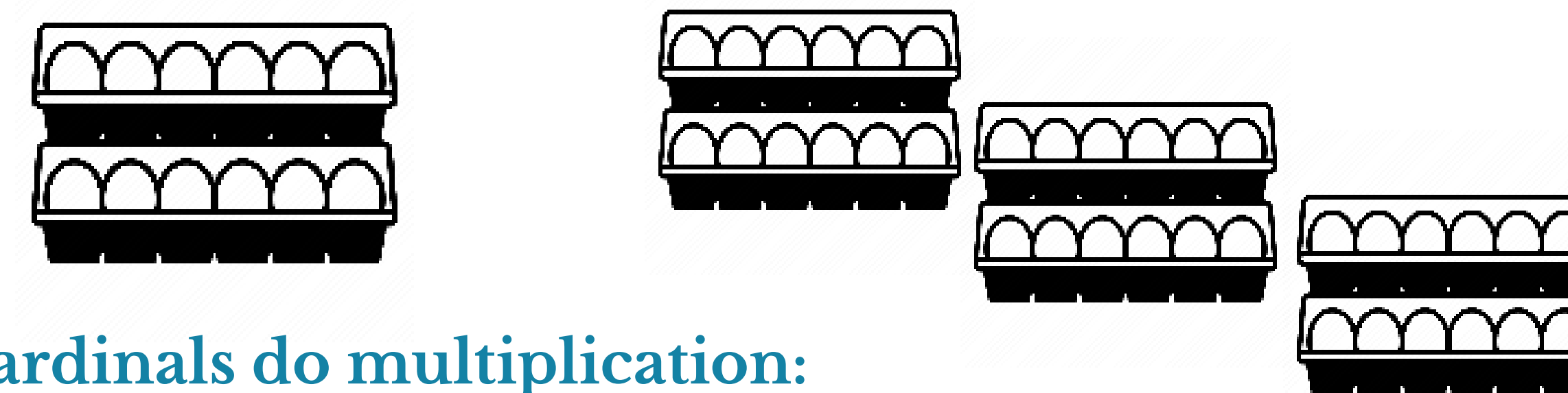
Cardinals as multipliers

Neat mass nouns are a problem for the **predicate-based view of cardinals** (Landman 2003), i.e., only if cardinals combine with a plural:

(6) a. ⟦two hundred⟧ = $\lambda x \in D_e$. $|x| = 200$
    b. ⟦200⟧ (⟦books⟧) = $\lambda x \in D_e$. $|x| = 200$ & *book (x)

(6a) is predicted to be applicable to neat mass nouns

Alternative: Ionin and Matushansky 2006, 2018: **cardinals combine** with singulars rather than plurals and mecessarily **with atomic predicates**

(7) a. dozen eggs   b.   three dozen eggs

Cardinals do multiplication:

(8) ⟦three⟧ = $\lambda P \in D_{\langle e,t \rangle}$: AT(P) . $\lambda x \in D_e$. $\exists S \in D_{\langle e,t \rangle}$
    [$\Pi(S)(x)$ & $|S| = 3$ & $\forall s \in S\ P(s)$]

    Π means 'partition'
    AT(P) is true iff $\forall x [P(x) \rightarrow \neg \exists y [P(y)\ \&\ y <_i x]]$

If cardinals require atomic predicates, they cannot take mass nouns as input (either neat or mess)

Pluralization of a mass noun would be vacuous

The cross-linguistic variation between plural and mass encoding for granular and aggregate concepts follows from semantic identity of plurals and neat mass

Russian derived mass nouns

Novel evidence: the Russian suffix *-ĭj-*: semi-productive for [+animate] bases (pejorative for [+human] bases, natural for disliked animals)

(9) animate neat mass
    a. *duračjó* 'fools' (cf. *durák* 'fool')
    b. *vorjó* 'thieves' (cf. *vor* 'thief')
    c. *voronjó* 'ravens, crows' (*vóron* 'raven', *voróna* 'crow')
    d. *komarjó* 'mosquitos' (*komár* 'mosquito')
    e. *otrébje* 'trash (arch.), rabble' (cranberry root)

(10) inanimate neat mass
    a. *dubjó* 'cudgels' (cf. *dubína* 'cudgel')
    b. *višénje* 'cherries, cherry trees' (*víšn/a* 'cherry')
    c. *beljó* 'linen, underwear' (from *bélij* 'white')
    d. *rvanjó* 'tatters' (from *rvánij* 'torn')

(11) inanimate mess mass
    a. *starjó* 'old stuff' (cf. *stárij* 'old')
    b. *korjó* 'bark stripped from trees' (cf. *korá* 'bark')
    c. *smoljó* 'resinous firewood' (cf. *smolá* 'resin')

Mess mass nouns arise from mass or adjectival bases
The atoms of count bases are preserved:

(12) Tị –   duračjo.
    you.SG [are]   fool.ĬJ
    You're a fool.

The suffix creates cumulative reference (the lattice structure)
Atoms come from the base stem

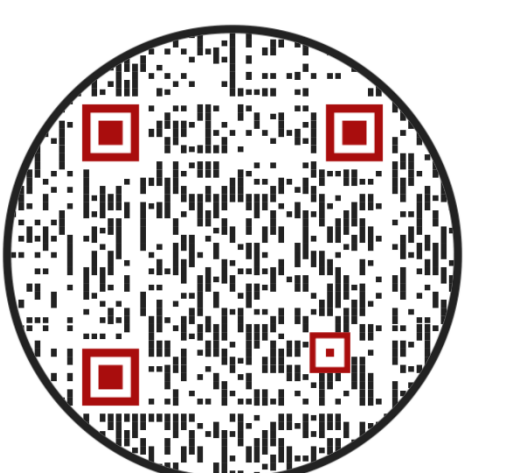So how does *-ĭj-* differ from Link's (1983) *-operator?

Suffix *-ĭj-* in plurals

Some 40 nouns require *-ĭj-* to form plurals:

(13) a. brat 'brother' → brát-ĭj-a 'brother-ĬJ-PL'
    b. kriló 'wing' → kríl-ĭj-a 'wing-ĬJ-PL'

These are real plurals: they can be counted

Hence the suffix there is **semantically null**
As maybe in the plurale tantum *loxmótja* 'rags'

For the discussion and references ☞