

## Group nouns in Russian as heads and as modifiers

Group terms (that is, NPs syntactically headed by group nouns such as *committee* or *deck*) pose semantic problems in that it is not obvious whether the denotation of group terms can be identified with the "associated" sums of members of the corresponding groups. Thus, Barker (1992) and Schwarzschild (1995) argued that group terms have atomic denotations which only stand in some relation to associated sums. This conclusion is not apparent, however, - in light of occasional use of group nouns as quantifiers - as in Russian ex. (1). While retaining the thesis that group nouns denote properties of atomic individuals, we suggest in this paper that the denotation of a group term may be either atomic or plural.

We discuss two types of Russian group terms with embedded NPs describing associated sums:

- (i) the "genitive of membership" construction (ex. (2)), and
- (ii) the construction with the "ablative" preposition *iz* (ex. (3)).

These constructions are different in a number of respects. First, in contrast to what we see in the prepositional construction (3), the embedded phrase in the genitive construction seems to be a NP rather than a DP (4). Second, an embedded NP in the genitive construction typically cannot be extraposed (5) or omitted in contexts where it is used, while usually there are no such constraints for an *iz* phrase. Third, the group term with an *iz* phrase is typically definite or at least specific, while the genitive construction is in most cases indefinite. Fourth, in default contexts the constructions stand in opposition as concerns their compatibility with quantity nouns (6) and with group nouns which do not presuppose the quantity of their members (7).

It can be argued that the differences between these two constructions correlate with peculiarities of their interpretations. The use of the prepositional construction seems to be felicitous if a group term refers to an atomic group with its own properties distinct from the properties of the associated sum. This is supported by occasional meaning shifts when quantity nouns turn out to denote certain not incidentally formed groups (8). The capacity of an *iz* phrase to be omitted and to be extraposed relates to its modifier interpretation. Assuming that *iz* denotes a relation **constitute** we may represent the denotation of (9) as (9').

However, when one speaks about an associated sum, the genitive construction is likely to be used. Here again we observe occasional semantic shifts, but this time to cardinal meanings (10). Another notable fact is that the genitive construction can be used with group nouns which do not presuppose quantity if and only if the genitive phrase denotes a speaker's evaluation of the members of a group (focusing on an associated sum) (11). We obtain the sum reading of such examples as (12) in the following way.

Assuming that the genitive phrase here serves as an argument of the coerced *relational* group noun (cf. Partee & Borshev 2000), we treat this group noun as providing the same relation **constitute** (12'a). Further, since the genitive phrase is not a DP in this construction, it can be considered to be of the predicative type  $\langle e, t \rangle$ . Then the group noun turns out to be of the type  $\langle \langle e, t \rangle, \langle e, t \rangle \rangle$ , that is a usual modifier type. We treat the genitive phrase here, however, not as saturating the membership argument of a group noun but as restricting its denotation (cf. Chung & Ladusaw ms. 2001), so the resulting structure (12'b) requires additional operations such as existential closure to get the NP type  $\langle e, t \rangle$ ,

Taking that group nouns can be interpreted as modifiers in the genitive construction (cf. plural agreement in (1)), we may expect that if they are non-specific (and hence do not introduce discourse referents), they are interpreted relatively to their heads, that is, they have narrow scope relatively to a denotation of the genitive NP - as in (12'a). Therefore group terms are able to refer to associated sums. But if groups do serve as discourse referents, they are likely to have scope over their associated sum (as in (12'b)), and this provides an account of why the sum interpretation is impossible when a group noun is modified by a demonstrative etc.

Thus, our analysis explains the sum interpretation of group terms via the capacity of group nouns to function as modifiers while keeping the atomic reading for specific and/or head group terms. Still, there remains a question of why certain group nouns are likely to be used within group terms denoting associated sums. One possible reason (supported by such examples as (10)) is that what contributes to such a reading is the capacity of quantity interpretation. If so, then group terms with modifying group nouns turn out to be very close to constructions described in Selkirk (1977) under the label "pseudopartitive" (cf. Vos 1999), as well as to the constructions with numeratives in various languages of South East Asia (Lander 2001).

### Examples:

(\* - 'is infelicitous', # - 'is infelicitous in an intended interpretation';  
nom - nominative, dat - dative, gen - genitive, loc - locative)

- (1) *Množestvo ljudej ob etom ničego ne znaet / znajut.*  
multitude-nom people-gen about this-loc nothing-gen not knows / know  
Many people do not know anything about this.
- (2) *kollekcija monet* a/the collection of coins  
collection-nom coins-gen
- (3) *kollekcija iz soroka monet* a/the collection of 40 coins  
collection-nom iz forty-gen coins-gen
- (4) a. *gruppa #(iz) trex ljudej* a/the group of three people  
group-nom iz three-gen people-gen  
b. *gruppa etix ljudej* \*a/the group of these people  
group-nom these-gen people-gen a/the group of people of this kind
- (5) *Staja mne vstretilas' \*(iz) zlyx sobak.*  
pack-nom me-dat was.met iz savage-gen dogs-gen  
I met a pack of savage dogs.
- (6) *para (\*iz) ljudej* a pair of people  
pair-nom iz people-gen
- (7) *komissija #(iz) rabočih* a/the commission consisting of workers  
commission-nom iz workers-gen
- (8) *trojka iz Antona, Ivana i L'va*  
triplet-nom iz Anton-gen Ivan-gen and Lev-gen  
the group of Anton, Ivan, and Lev formed not incidentally (e.g., a court);  
not some incidental group of three men consisting of Anton, Ivan, and Lev
- (9) *komissija iz etih ljudej* a/the commission of these people  
commission-nom iz these-gen people-gen
- (9')  $\lambda x$  [commission(x) & constitute(these-people)(x)]
- (10) *armija činovnikov* a lot of officials  
army-nom officials-gen
- (11) *komissija idiotov* a commission of idiots  
commission-nom idiots-gen
- (12) *para nosok* a. two socks  
pair-nom socks-gen b. a/the pair of socks
- (12') a.  $\|para\| = \lambda x \lambda y$  [pair(y) & constitute(x)(y)] Coercion  
b.  $\|para\ nosok\| = \lambda y \lambda x$  [pair(y) & constitute(x)(y) & socks(x)] Restriction
- (12'') a.  $\lambda x \exists y$  [pair(y) & constitute(x)(y) & socks(x)]  
b.  $\lambda y \exists x$  [pair(y) & constitute(x)(y) & socks(x)]

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