Indefiniteness, NP-type and Information Structure*

Ljudmila Geist
(University of Stuttgart)

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In some Slavic languages such as Russian, bare NPs are used as arguments:

(1) Anna uvidela devočku.
    Anna saw (the/a) girl

However, not every bare NP allows an indefinite interpretation. First, there seems to be a restriction with respect to the lexical type of the noun.

(2) Ona vstretila otca.
    She met (the/*a) father
Second, there is a restriction with respect to the position of the respective NP.

(3) *Devočka* poljačka.
    (the/*a) girl is Polish

(4) indefinite:
    (There are many *Odna / kakaja-to devočka* poljačka.
    children...) *One_{Indef} / wh-TO girl is Polish
    ‘A / Some girl is Polish.’

The goal: to determine the conditions for the indefinite interpretation of bare NPs in Russian and build them into the theory of NP interpretation.
(6) Definiteness as uniqueness
the definite article indicates uniqueness of the referent in the domain of discourse,
the indefinite article indicates neutrality with respect to uniqueness

Sortal nouns project an NP of a predicate type \( \langle e, t \rangle \) (cf. Chierchia 1998), as shown in (7a). Since verbs need arguments of type \( e \) or \( \langle e, t \rangle, t \rangle \), this leads to a mismatch, which can be solved by type-shift operators (cf. Partee 1987).

(7) a. \([_{\text{NP} dovočka}} \) ‘girl’ : \( \lambda x \ \text{girl}(x) \)
b. \([_{\text{D } \exists_{OP}}] : \lambda P \ \lambda Q \ \exists x (P(x) & Q(x)) \rightarrow \text{indefinite interpretation} \)
c. \([_{\text{D } \iota_{OP}}] : \lambda P \ \Iota x (P(x) \rightarrow \text{definite interpretation} \)
In his theory of concept types and determination, Löbner distinguishes four basic concepts, cf. Table 1.

<table>
<thead>
<tr>
<th>Type</th>
<th>Examples</th>
<th>Uniqueness</th>
</tr>
</thead>
<tbody>
<tr>
<td>sortal</td>
<td>flower, stone</td>
<td>–</td>
</tr>
<tr>
<td>relational</td>
<td>tire (of the car), friend</td>
<td>–</td>
</tr>
<tr>
<td>functional</td>
<td>mother, roof</td>
<td>+</td>
</tr>
<tr>
<td>individual</td>
<td>pope, temperature</td>
<td>+</td>
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Table 1: lexical types of nouns (Löbner 2011)

devočka ‘girl’ → sortal noun; the definite or indefinite interpretation of sortal nouns in Russian depends on the context, it is not pre-determined by the lexical type of the noun.
Relational nouns are expected to behave like sortal nouns, i.e. to allow both interpretations.

(8) U ego mašiny opjat’ lopnulo koleso.
    at his car again blew up (the/a) tire

The noun father in example (2) is a functional noun. Since such nouns express unique concepts, bare NPs with this noun as a head are definite. An indefinite interpretation can only be achieved by adding of an indefiniteness marker.

(2) a. Ona vstretila otca.
    She met (the/*a) father

b. Ona vstretila odnogo otca.
    she met one_{Indef} father
Individual nouns can also only be interpreted as definite. The indefiniteness marker *odin* ‘some’ may shift such individual concepts to relational ones.

(9) a. On chočet govorit’ s rimskim papoj. 
   he wants to-speak with (the/*a) Pope

   b. Na kartine izobražen *odin* rimskij papa.
   in picture is-represented one_{Indef} Pope

(10) Povysilas’ temperatura.
   increased (the/*a) temperature

To conclude, in Russian, bare NPs formed of individual and functional nouns can only receive a definite interpretation because of their inherent uniqueness. Sortal and relational nouns are lexically underspecified.

- the theme: the starting point of the utterance, old information,
- the rheme: contributes highlighted information about the theme, is new.

According to the literature, bare NPs in the theme have to be interpreted as definite.

(11) [Kniga]_{Theme} [ležit na tom stoLE]_{Rheme}

(the /*a) book is-lying on that table
‘The book is lying on that table.’

(12) [Na tom stole]_{Theme} [ležit KNIga]_{Rheme}

on that table is-lying (a/the) book
‘A/The book is lying on that table.’
Indefinite Topics

However, the notion of theme-rheme is problematic since the distinction between two aspects is disregarded: the aboutness aspect and the highlighting aspect.

Two levels of IS (cf. e.g. Krifka 2007):

- topic-comment: the partitioning of a sentence with respect to aboutness
- focus-background: the partitioning with respect to information highlighting

Geist (2010): the focus-background structure is irrelevant for the restriction on indefinite interpretation, it is the topic-comment structure, which is relevant.

- Topic-comment

(13) a. [/John]_T [called \MAX]_C.
   b. /John_T, he called \MAX.

(14) Hypothesis: Bare NPs in Russian can be interpreted as indefinite only if they belong to the comment. They cannot be interpreted as indefinite if they serve as aboutness topics.
Indefinite Topics

Introduction – NP-type – IS – Indefinite topics – Specificity – Conclusion

(15) (Why is it so noisy?)
[ReBEnok plačet.]c
(a) child is-crying
‘A child is crying.’

Thetic statements like (15) lack an overt topic and the whole sentence is the comment.

(16) indefinite:
(There are many children.) #Devočka poljačka
(a) girl is Polish

In this sentence the predicate be Polish is the so-called individual-level-predicate. As Jäger (2001), among others, shows, subjects of individual-level-predicates are necessarily aboutness topics since such sentences exclude a thetic interpretation.
Indefinite Topics

Are indefinite topics possible? Reinhart (1981), among others, assumes that indefinites are possible aboutness topics in English.

(17) A man had two sons, and he came to the first, and said …,


However, other scholars point to the fact that plain indefinites cannot always serve as aboutness topics.

(18) a. *A window, it’s still open.          (Gundel 1988)
    b. A window that we painted yesterday, it’s still open.

(19) A daughter of a friend of mine, she got her BA in two years. (Gundel 1985)
Erteschik-Shir (1997: 40) and Hallman (2010) note that in English subjects of individual-level-predicates, which always serve as aboutness topics, are ungrammatical without modifiers:

(20) a. Are any firemen intelligent?  
    b. *Yes, a fireman is intelligent.  
    c. Yes, a fireman in the third brigade is intelligent.

Reinhart (1981) explains the exclusion of some indefinite DPs from topic positions by assuming that topics must be referential in order to provide an entity for an aboutness statement. What Reinhart calls referential is called specific in other approaches.

(21) Felicity Condition on Indefinite Topics
    Indefinites can serve as aboutness topics if they are specific.
Specificity is often understood as identifiability by the speaker. Identifiability does not necessarily mean that the speaker is able to name the respective object.

(22) *Specificity condition*

The speaker is able to provide a property singling out the referent from other referents.

Fodor and Sag (1982): a correlation between descriptive richness and specific interpretation.
To account for different types of specificity von Heusinger (2002) suggests general treatment of specificity as referential dependency or anchoring:

(23) Referential anchoring for specific DPs (von Heusinger 2002)
    The referent of a specific NP is referentially anchored to another expression
    (the speaker or another discourse item).

Implementations of the idea of referential anchoring (cf. von Heusinger 2011):
- a function variable for Skolem functions (Bende-Farkas and Kamp 2001, Hintikka 1986),
- choice functions (Chierchia 2001, von Heusinger 2002, Kratzer 1998, among others),
- plain functions (Onea & Geist 2011),
- anchored representations in DRT (Kamp and Bende-Farkas submitted).
Indefinite Topics

Introduction – NP-type – IS – Indefinite topics – Specificity – Conclusion

Kratzer (1998):
(24) a. [a girl]: \( \lambda P \exists y \ (\text{girl}(y) \ & P(y)) \)
    b. [a girl/a certain girl]: \( \lambda P (P(f_x (\text{girl}))) \)    (Kratzer 1998)
    c. [a girl]: \( \lambda P (P(f_{\text{SPEAKER}} (\text{girl}))) \)

In general, we can assume that the choice function is an operator, which can apply to predicate NPs in languages without articles and turn them into specific indefinite DPs under certain conditions.

(25) \([_{D\text{CF}OP}]: \lambda Q \ \lambda P (P(f_x (Q)))\)

To conclude, indefinites are banned from topic positions if they are not specific. Specificity can be understood as identifiability. For a specific NP the speaker is able to provide a property singling out the referent from other referents. The referent of a specific DP is referentially anchored to another expression.
Specificity

Introduction – NP-type – IS – Indefinite topics – **Specificity** – Conclusion

**Identifiability /Scope**

(26) a. Maša iščet gazetu.
    Mary is-looking-for (a) newspaper

b. *Continuation indicating identifiability:* It was lying on the table.

c. *Continuation indicating non-identifiability:* I have no idea, which one exactly she is looking for

**Scope**

(27) Každyj učenik vyučil stichotvorenie Puškina.
    Every pupil learned (a) poem by Pushkin

i. *wide scope reading:* DP > ∃

ii. *narrow scope reading:* ∃ > DP

Since bare indefinite NPs in Russian do not indicate identifiability and have narrow scope, they can be assumed to be non-specific.
Specificity

Introduction – NP-type – IS – Indefinite topics – **Specificity** – Conclusion

Are indefinite topics possible in Russian?

- Indefiniteness marker *odin*

(29) a. (*Odna) devočka ušla iz doma v les
   one\textsubscript{Indef} girl went from home into forest

   [Russian fairy-tail *Tri medvedja ‘Three bears’.*]

   b. \([D \; \text{odin}]: \lambda Q \lambda P (P(f_{\text{SPEAKER}} (Q)))\)

- NP-modification (Birkenmaier 1979, Zybatow and Junghanns 1998):

(30) a. Starucha v nočnoj kofte otkryla protivopoložnuyu dver’ i sprosila ego …
   (an) old-woman in pyjamas opened opposite door and asked him
   ‘An old woman in pyjamas opened the opposite door and asked him …’

   [Birkenmaier 1979: 68]

   b. \([D \; CF_{OP}]: \lambda Q \lambda P (P(f_{x} (Q)))\)
The lexical and information structural restrictions on the indefinite interpretation of bare NPs in Russian can be determined as follows:

- **Lexical restrictions:** Only sortal and relational nouns as bare NPs allow an indefinite interpretation. Individual and functional nouns as heads of NPs can only have a definite interpretation because of their inherent uniqueness.
- **Information-structural restrictions:** Sortal and relational NPs can be interpreted as definite or indefinite in the position of comment. The indefinite interpretation is excluded for them if they serve as topics. This is, because bare singular NPs under their indefinite interpretation are not specific. Aboutness topics, however, must be specific.
- **Specific interpretation of indefinite NPs in Russian** can be achieved by adding specificity markers like *odin* or by adding descriptive material to it. The latter possibility can be explained by assuming that a choice functional type shift may apply to bare NPs if they contain modifiers.
Selected references


Ionin, Tania. in prep. *Pragmatic Variation among Specificity Markers*.


Appendix
Fokus-Background and indefiniteness

(1) A: U kogo est’ karandaš?  
‘Who has (a) pencil?’  
B: [U NINY]F [jest’ karandaš]B.  
Nina has (a) pencil  
‘Nina has a pencil.’

(2) (What did Mary give the/a boy?)  
Mary gave (the/a) boy_{Dat} (the/an) apple_{Acc}  
‘Mary gave the/a boy the/an apple.’