

(In)definiteness in natural languages

Day 4

Daria Seres

EGG Summer School 2022

Interpretations of indefinites

Example from (Fodor 1970)

(1) Mary believes that *a friend of mine* is a bus driver.

What are the two interpretations available for the NP?

Interpretations of indefinites

Possible paraphrases:

- (2) a. Mary believes of a friend of mine that he is a bus driver.
(specific)
- b. Mary believes that a friend of mine is a bus driver
(non-specific)
- (3) a. There is a friend of mine that Mary believes that is a bus
 driver.
- b. Mary believes that there is a friend of mine who is a bus driver.

Morphological marking of specificity

Russian (Example from Borik 2016)

- (4) a. Maša xočet vyjti zamuž za **kakogo-to/odnogo**
Maša wants marry PREP some/one
izvestnogo bankira.
famous banker
'Maša wants to marry a/some/one famous banker.'
(there is a specific banker)
- b. Maša xočet vyjti zamuž za **kakogo-nibud'** izvestnogo
Maša wants marry PREP some famous
bankira.
banker
'Maša wants to marry a/any famous banker.'
(there is no specific banker)

Morphological marking of specificity

Notice that the use of the morphological marking of (non-) specificity is not obligatory and a bare NP may be interpreted as having different scope, same as the indefinite NP in English.

- (5) Maša xočet vyjti замуž za izvestnogo bankira.
Maša wants marry PREP famous banker
'Maša wants to marry a famous banker.'

Morphological marking of specificity

Spanish (first introduced in Rivero 1975 for Spanish, extended to other Romance languages in Leonetti 2012)

- (6) a. Me interesa ver una guía que **tiene** mapas.
me interests see a guide that has.IND maps
- b. Me interesa ver una guía que **tenga** mapas.
me interests see a guide that has.SUBJ maps
'I am interested in seeing a guide that contains maps.'

Morphological marking of specificity

Other languages (from Farkas & Brasoveanu 2021):

- “Non-specific” markers: *ku* in St’át’imcets (Matthewson 1999), *algún* in Spanish (Alonso-Ovalle and Menéndez-Benito 2010), *some* in English (Farkas 2002), *vreun* in Romanian (Fălăuș 2010), *un* NP *quelconque* in French (Jayez and Tovenà 2002; 2006), *eyze* in Hebrew (Kagan 2007), *irgendein* in German (Kratzer 2005), *egy-egy* DPs in Hungarian, *câte*-marked indefinites in Romanian (Farkas 2001).
- “Specific” markers: determiners such as *a certain* and its close equivalents in other languages (Hintikka 1986), *this* indefinites (Prince 1981; Ionin 2006), partitives (Enç 1991), and the non-*ku* determiners in St’át’imcets (Matthewson 1999).

Types of specificity

According to Farkas (1994):

- scopal
- epistemic
- partitive

Scopal specificity

- Whether a nominal is interpreted within or outside the scope of certain operators or quantifiers

(Examples from Farkas & Brasoveanu 2021)

- (7)
- Every* girl admired *a* teacher.
 - Amanda *wants* to talk to *a* teacher.
 - If* Chris had talked to *a* teacher, he would have had the facts earlier.
 - Bob didn't talk to *a* teacher about this.

Scopal specificity

To disambiguate:

- (8) a. Delia wants to buy an apartment in San Francisco.
- b. Delia wants to buy *a certain* apartment in San Francisco.

BUT: *A certain* NPs may occur within the scope of universal quantifiers (Hintikka 1986)

- (9) Every man forgot a certain date. Namely his wife's birthday.

Epistemic specificity

- It does not tie the specific/non-specific distinction to scope.
- Introduced in Fodor and Sag (1982)

(10) *A student in Syntax 1* cheated on the exam.

- a. The speaker has a particular individual in mind. (specific)
- b. The speaker asserts that there is a cheater among the relevant students. (non-specific)

- ▶ referential vs. quantificational indefinites
- ▶ the distinction is made on the basis of the scopal properties of indefinites

Epistemic specificity

- Referential indefinites can be compared with proper names or demonstratives:

(11) *That student / Tom* cheated on the exam.

- They do not 'take' scope, they are interpreted as having wide scope simply in virtue of being referential.
- Quantificational indefinites (like other quantifiers) do not scope out of islands.

(12) a. Pauline has to talk to every diplomat who was in touch with a Chinese dissident.

$\exists > \forall; \forall > \exists$

b. Pauline has to talk to a diplomat who was in touch with every Chinese dissident.

$\exists > \forall; * \forall > \exists$

Epistemic specificity

- The ability to take different scopes is an illusion.
- Lexical ambiguity theory: two indefinite articles in the lexicon.
- If indefinites don't take scope, then it would be impossible to find a sentence with an 'intermediate' scope, but they exist Farkas (1981) and Abusch (1994).

Epistemic specificity

- (13) Every professor rewarded every student who read a book on the semantics-pragmatics interface.
- (14) a. a book $>$ every professor $>$ every student
There is a particular book on the spi such that every professor rewarded every student who read this book.
- b. every professor $>$ a book $>$ every student
For every professor there is a certain book on the spi such that the professor rewarded every student who read this book
- c. every professor $>$ every student $>$ a book
Every professor rewards every student who reads (any) book on the spi.

Certain forms induce certain readings

- (15) Every professor rewarded every student who read a book.
- a. Every professor rewarded every student who read a book on the semantics-pragmatics interface that was discussed recently on the Linguist List.
 - b. Every professor rewarded every student who read a book that she had recommended.
 - c. Every professor rewarded every student who read some book.

Epistemic specificity

- Karttunen's (1976) idea: specificity is closely related to the 'referential intentions of the speaker'
- The speaker has a particular individual in mind.
- A specific indefinite makes reference to an entity known to the speaker and/or inherently identifiable.

Note: There's also anti-specificity.

- Under this reading the speaker does not want the referent of the NP to be identified by the listener.
- von Stechow (2011): the absence of any referential intent on the side of the speaker.
- Giannakidou & Quer (2013), Alonso-Ovalle & Menéndez-Benito (2013); Jayez & Tovena (2013); Etxeberria & Giannakidou (2017); Espinal & Cyrino (2021).

Some languages have markers for anti-specificity.

(16) Russian

Maša xočet vyjti zamuž za **koe-kakogo** izvestnogo
Maša wants marry PREP **anti-sp** famous
bankira.
banker

'Maša wants to marry a/one famous banker.'
... But I can't tell you which one yet.

Epistemic specificity

- Scopal specificity and epistemic specificity are related, but distinct phenomena.
- *Some*-indefinites in English
 - Epistemically non-specific.
 - Scopally ambiguous.
- *Certain*-indefinites in English
 - Epistemically specific.
 - Wide scope (although there are cases where these indefinites have a narrow scope).

Partitive specificity

- Enç (1991)
- Empirical goal: to characterize the class of NPs that receive Accusative case-marking in Turkish: definites and some indefinites.

(17) Ali bir piyano-yu kiralamak istiyor.
Ali one piano-ACC to-rent wants
'Ali wants to rent a certain piano.'

(18) Ali bir piyano kiralamak istiyor.
Ali one piano to-rent wants
'Ali wants to rent a (non-specific) piano.'

- Out-of-the-blue: the scopal properties are the same as in English
- (17) is also compatible with the narrow scope reading if there are two pianos between which Ali is trying to decide.

Partitive specificity

- An NP is partitive if its referent is a subset of a previously introduced referent.

(19) Susan wants to marry *one of Laura's brothers*. (overtly partitive)

(20) A group of youngsters appeared on the stage. *A girl* began to sing. (covertly partitive)

- Partitive specificity is independent of both scopal and epistemic specificity.

Types of specificity. Summary

- ① scopal specificity, defined in terms of wide vs narrow scope relative to particular operators (a heterogeneous notion due to the nature of operators)
- ② epistemic specificity, defined in terms of whether the speaker has a particular entity in mind or not
- ③ partitive specificity, defined in terms of whether the referent of the NP is a subset of a familiar set of entities or not.

A note on a *certain N*

- It doesn't always have a wide scope.
- It's not always epistemic.
- It may be partitive but doesn't have to be (Enç 1991)

Example from Farkas (2002):

(21) Borges closed his eyes and saw *a certain number of birds*. He quickly reopened them without having counted the birds he saw.

- Farkas (2002): The referent has to be in principle identifiable even if in the actual context there is no individual who can identify it → Maybe another type of specificity: identifiability.

A note on indefinite *this*-NPs

Prince 1981

(22) There is *this* giant spider in the cupboard.

- They introduce discourse referents.

Example from Geurts (1999):

(23) ? Yesterday our little daughter brought [a giant spider]_i into the house, and now there is [this giant spider]_i in the cupboard.

- It's not possible for the *this*-NP to refer back to the previously introduced *spider*. It functions as an existential expression.
- *This*-indefinites behave more like specific than non-specific: they generally take wide scope.

A note on indefinite *this*-NPs

- (24) If this giant spider is in the cupboard, Betty will go berserk.
- a. There is a giant spider at large, and if it's still in the cupboard, Betty will go berserk.
 - b. If there is a giant spider in the cupboard, Betty will go berserk.
- (24a) seem to be a better paraphrase.
 - Specificity and definiteness are related phenomena.

Bare NPs

Bare plurals in English

- BPIs are different from ordinary indefinites.
- Empirical evidence: scope.

- (25)
- Mary didn't buy books. (only narrow)
 - Mary didn't buy a book. (wide and narrow?)
 - Mary didn't buy some books. (only wide)
- (26)
- John is looking for a policeman. (both scopes)
 - John is looking for some policemen. (both scopes?)
 - John is looking for policemen. (only narrow scope)
- (27)
- Some lego pieces are in each box. (only wide scope?)
 - A lego piece is in each box. (wide or narrow?)
 - Lego pieces are in each box. (only narrow scope)

Chierchia's (1998) analysis

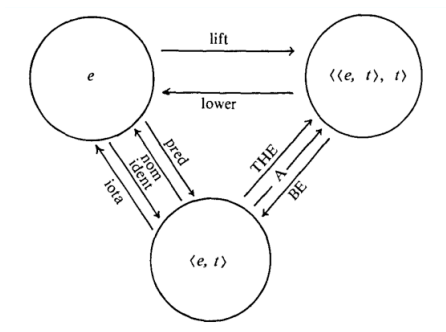
- Carlson's (1977): BPIs in English have a generic and an existential reading

(28)	a. Dogs are common.	<i>generic</i>
	b. Dogs bark.	<i>generic</i>
	c. Dogs are barking.	<i>existential</i>

- Chierchia (1998): Bare plurals in English are (proper) names of kinds. Kinds correspond to maximal individuals. Even though they are the same semantic object as definite plurals, they are of a different *sort*.

Type shifting (Partee 1986/7)

- NPs may be properties ($\langle e, t \rangle$), individuals (e) and quantifiers ($\langle \langle e, t \rangle, t \rangle$). Their denotation may shift according to certain principles.



Chierchia's (1998) analysis of English BPIs

(29) Type-shifting operators

- ι : properties to individuals (deriving definite NPs)
- \cap : properties to kinds (deriving kind-referring NPs)
- \exists : properties to existential quantifiers (deriving indefinite NPs)

(30) *Semantic derivation of plural definites*

$$\iota \left\{ \begin{array}{ccc} & a + b + c & \\ a + b & a + c & b + c \end{array} \right\} = a + b + c$$

such that $a + b + c$ belongs to the set of individuals

(31) *Semantic derivation of kinds*

$$\cap \left\{ \begin{array}{ccc} & a + b + c & \\ a + b & a + c & b + c \end{array} \right\} = a + b + c$$

such that $a + b + c$ belongs to the set of kinds

Chierchia's (1998) analysis of English BPIs

(32) English
(*The) birds evolved from **(*the)** dinosaurs.

(33) Spanish

***(Los)** pájaros evolucionaron de ***(los)** dinosaurios.
the.M.PL birds evolved from the.M.PL dinosaurs

(34) Russian

Pticy proizošli ot **dinozavrov**.
birds.NOM evolved from dinosaurs.GEN

Chierchia's (1998) analysis of English BPIs

Chierchia (1998), Dayal (2004): languages lexicalize operators differently.

- (35)
- English lexicalizes ι but not \cap by the definite article, \exists by the indefinite article
 - Spanish lexicalizes both ι and \cap by the definite article, \exists by the indefinite article
 - Russian doesn't lexicalize ι , \cap , or \exists as it has no articles. (The type shift is applied covertly).

Chierchia's (1998) analysis of English BPIs

Derivation of existential meanings for BPIs in English

- Bare plurals are *always* kind-denoting.
- The covert operator \cap is applied.
- How can they combine with individual-level predicates?

(36) John collected mushrooms yesterday.

a. Kind interpretation:

John collected \cap (mushrooms) yesterday.

#John collected “the mushroom-kind” yesterday.’

b. Intuitive interpretation: $\exists x$: x is a mushroom (plural object)
and John collected x yesterday

- Chierchia's proposal: kinds are mapped back to properties that gave rise to them by applying \cup .

Chierchia's (1998) analysis of English BPIs

- Derived Kind Predication (DKP)

(37) $\exists x: x$ is in $[\cup^n(\text{mushrooms})]$ and John collected x yesterday, where $[\cup^n(\text{mushrooms})]$ could be read as the set of instantiations of the mushroom-kind.

Next time bare NPs in languages without articles