

Accommodating Indefinites

Manfred Krifka

Introduction

Goal: Explain interpretation of indefinites depending on accent. (Cf. Krifka (2001)).

- (1) a. *A freshman usually wears a baseball cap.*
 ‘Most freshmen wear a baseball cap.’
 b. *A fréshman usually wears a baseball cap.*
 ‘Most wearers of baseball caps are freshmen.’

Focus-based accounts and the requantification problem

Focus-based account on accent and quantification, cf. Rooth (1985)):

- (2) $[[\text{Mary usually took } \text{Jóhn}_F \text{ to the movies}]]$:
 $\text{MOST}([\text{Mary took } \text{Jóhn}_F \text{ to the movies}]_A, [\text{Mary took } \text{Jóhn}_F \text{ to the movies}]_O)$
 $\text{MOST}([\text{Mary took someone to the movies}], [\text{Mary took John to the movies}])$

Focus-sensitive interpretation of *usually*, schematic:

- (3) $[[\text{usually }]] = \text{MOST}([\]_A, [\]_O)$

Detour: Dynamic Interpretation

Assume the following format (we disregard possible world parameter):

- (4) a. Discourse referents (DRs): numbers; variables i, i etc.
 b. Assignments: partial functions from DRs to entities; variables g, h, k .
 c. Extension of an assignment g for an index i resulting in assignment h ,
 $g <_i h$ iff $g \uparrow i = h \uparrow i$ and $\text{DOM}(h) = \text{DOM}(g) \cup \{i\}$
 d. The increment of an assignment g with $h, g \& h$:
 $g \uparrow i = h$, if $\text{DOM}(g) \cap \text{DOM}(h) = \emptyset$, undefined else.
 e. Common grounds (contexts): Sets of assignments, all with the same domain,
 variables c, c etc.; $\text{DOM}(c)$ = the domain of the assignments of c .
 f. Clause meanings: Context change potentials, CCPs,
 functions from input contexts to output contexts., var. α, β , etc.
 g. Update of a context c by a CCP α , written $c + \alpha$, instead of $\alpha(c)$
 h. Dynamic conjunction of CCPs: $\alpha; \beta = c[c + \alpha + \beta]$
 i. Reduction of a context c to those assignments that support α :
 $c \uparrow \alpha = \{g \uparrow c \mid \{g\} + \alpha\}$

Interpretation of indefinites and definites:

- (5) a. *A man came in. He smoked a cigar.*
 b. LF: $[[a \text{ man}]_1 [t_1 \text{ came in}] [a \text{ cigar}]_2 [he_1 \text{ smoked } t_2]]$

- c. Interpretation with respect to an input context c_0 :
 $c_0 + [[a \text{ man}]_1] \quad c_0 + c\{h \mid g \uparrow c [g <_1 h \text{ MN}(h_1)]\}$
 $+ [[t_1 \text{ came in}]] \quad + c\{g \uparrow c \mid \text{CI}(g_1)\}$
 $+ [[a \text{ cigar}]_2] \quad + c\{h \mid g \uparrow c [g <_2 h \text{ CG}(h_2)]\}$
 $+ [[he_1 \text{ smoked } t_2]] \quad + c\{g \uparrow c \mid \text{SM}(g_1, g_2)\}$
 $e = \{h \mid g \uparrow c_0 [g <_{1,2} h \text{ MN}(h_1) \text{ CI}(h_1) \text{ CG}(h_2) \text{ SM}(h_1, h_2)]\}$

Interpretation of quantified sentences:

- (6) $\text{USUALLY}([\])$
 $= c\{g \uparrow c \mid \text{MOST}(\{h \mid g \& h \uparrow \{g\} + \alpha, \{h \mid \{g \& h\} + \beta\})\}$
 ‘Reduce the input context c to those assignments g
 such that: for most increments h induced by α on g ,
 $g \& h$ supports the truth of β .’
- (7) a. *Usually, if a man came in, he smoked a cigar.*
 b. $c_0 + [[\text{usually } [a \text{ man}]_1 [t_1 \text{ came in}]] [a \text{ cigar}]_2 [he_1 \text{ smoked } t_2]]]$
 c. $= c_0 + \text{USUALLY}([\text{a man}]_1 [t_1 \text{ came in}]], [[a \text{ cigar}]_2 [he_1 \text{ smoked } t_2]])]$
 d. $= \{g \uparrow c_0 \mid \text{MOST}(\{h \mid g \& h \uparrow \{g\} + [[a \text{ man}]_1 [t_1 \text{ came in}]]\},$
 $\{h \mid \{g \& h\} + [[a \text{ cigar}]_2 [he_1 \text{ smoked } t_2]]\})\}$
 e. $= \{g \uparrow c_0 \mid \text{MOST}(\{h \mid g <_1 g \& h \text{ MN}(g \& h_1) \text{ CI}(g \& h_1),$
 $\{h \mid k[\{g \& h\} <_2 k \text{ CG}(k_2) \text{ SM}(k_1, k_2)]\})\}$

The resulting context contains those assignments g of the input context c_0 such that
 -- most increments h that extend g insofar as they map the index 1 to a man that came in
 -- are also increments that can be extended to an assignment k that map the index 2 to a cigar
 such that 1 smoked 2.

This amounts to a quantification over incoming men.

Focus-based accounts in dynamic interpretation

- (8) *A blue-eyed dog is usually intelligent.*
 ‘Most blue-eyed dogs are intelligent.’

Ordinary meanings and alternatives:

- (9) a. $[[a \text{ dog}]_1 [t_1 [is \text{ intelligent}]_F]]]$
 $= c\{h \mid g \uparrow c [g <_1 h \text{ DG}(h_1) \text{ IN}(h_1)]\}$
 b. $[[a \text{ dog } [t_1 [is \text{ intelligent}]_F]]_A]$
 $= \{c\{h \mid g \uparrow c [g <_1 h \text{ DG}(h_1) \text{ P}(h_1)]\} \mid P \text{ ALT}(\text{IN})\}$
 c. Assuming that alternatives are ‘intelligent’ and ‘dumb’:
 $= \{c\{h \mid g \uparrow c [g <_1 h \text{ DG}(h_1) \text{ IN}(h_1)]\},$
 $c\{h \mid g \uparrow c [g <_1 h \text{ DG}(h_1) \text{ DU}(h_1)]\}\}$

Union sets of context-change potentials should be context-change potentials, hence:

- (10) If A is a set of context-change potentials with the same domain (input contexts),
 then $A = \{c, c \mid c \text{ DOM}(A) \text{ } c = \{c + \alpha \mid \alpha \in A\}\}$
- (11) $(9.c) = c\{h \mid g \uparrow c [g <_1 h \text{ DG}(h_1) \text{ IN}(h_1) \text{ DU}(h_1)]\}$

Focus-sensitive interpretation of *usually*:

(12) $[\textit{usually}] = \text{USUALLY}([\]_A, [\])$

(13) a. $[\textit{usually} [a \textit{dog}_1 [t_1 \textit{is intelligent}]_F]]$

b. If $\text{ALT}(\text{IN}) = \{\text{IN}, \text{DU}\}$:

$= \text{USUALLY}(\{ \text{c}\{h \mid g \text{ c}[g <_1 h \text{ DG}(h_1) \text{ IN}(h_1) \text{ DU}(h_1)]\}, \{ \text{c}\{h \mid g \text{ c}[g <_1 h \text{ DG}(h_1) \text{ IN}(h_1)]\} \})$

c. $= \text{c}\{g \text{ c} \mid \text{MOST}(\{h \mid g \& h \text{ } \{g\} + \text{c}\{h \mid g \text{ c}[g <_1 h \text{ DG}(h_1) \text{ IN}(h_1) \text{ DU}(h_1)]\}, \{h \mid \{g \& h\} + \text{c}\{h \mid g \text{ c}[g <_1 h \text{ DG}(h_1) \text{ IN}(h_1)]\} \})\}$

d. $= \text{c}\{g \text{ c} \mid \text{MOST}(\{h \mid g <_1 g \& h \text{ DG}(g \& h_1) \text{ IN}(g \& h_1) \text{ DU}(g \& h_1)\}, \{h \mid k[g \& h <_1 k \text{ DG}(k_1) \text{ IN}(k_1)]\})\}$

The requantification problem

Problem with (13.d): The conditions $g <_1 g \& h$ and $g \& h <_1 k$ cannot hold both, as 1 is not a novel index for $g \& h$ anymore. This is the **requantification problem** (von Fintel (1994), Rooth (1995)). Informally, the following analysis is given:

(14) ‘For most cases where there is a dog that is intelligent or dumb, there is a dog that is intelligent.’

Rooth’s proposal (‘domain regulator theory’): Give up the novelty conditions for indefinites, incorporated in $g <_1 g \& h$, assume that indices may be new or old.

Problem: Without novelty condition, indefinites may pick up old discourse referents.

(15) *A man₁ came in. A man₁ sat down.*
could be interpreted as ‘A man came in. He sat down.’

Why are indefinites not used for picking up discourse referents? Perhaps because definites, which require an old index, do a better job in normal cases because they are more specific (quantity implicature). Cf. reasoning for distribution of pronominal forms (pronouns, reflexives) in Horn (1984).

Other proposals to deal with requantification problem: von Fintel (1994), quantification over minimal situations; Percus (1997), indefinites have uniqueness presuppositions. For problems of these accounts see Krifka (2001).

Presupposition-based accounts

Presupposition-sensitivity of quantification,

Cf. [Schubert, 1989 #8913], Kasper (1992):

- (16) a. *Cats usually land on their feet.*
‘If a cat touches ground when falling, it usually lands on its feet.’
b. *Robin Hood never misses.*
‘If Robin Hood tries to hit something, he never misses (it).’

- (17) *Mary would have solved the problem.*
‘If Mary were confronted with the problem, she would have solved it.’

Presupposition-sensitive interpretation of *usually*, schematic:

- (18) $[\textit{usually}] = \text{MOST}(\text{Pres}([\]), [\])$,
where $\text{Pres}([\])$: The cases where the presuppositions of are satisfied.

Goal: Only one interpretation rule for adverbial quantifiers. Options: (a) Reduce presupposition sensitivity to focus sensitivity; (b) Reduce focus sensitivity to presupposition sensitivity. For (b) cf. von Fintel (1994), Rooth (1999): Focus induces (existential) presupposition.

1 Non-novel indefinites and adverbial quantification

1.1 Proposal in a nutshell

In examples like (1) the quantificational adverbial does not exploit focus, but **non-novelty** of indefinite NPs. This is indicated by deaccentuation / topic accent (˘) of the indefinite, which results on default accent (ˆ) on some other part, cf. Ladd (1980).

(19) *Usually, [a blue-eyed dog]_{NN} is intelligent.*

- (20) a. *[A frèshman]_{NN} usually wears a bàseball cap.*
b. *A frèshman usually wears [a bàseball cap]_{NN}.*

Non-novel indefinites presuppose that their **discourse referent is given** (an element of the input context). But in contrast to definites, they do not presuppose that the description identifies a given discourse referent uniquely, hence non-novel indefinites are only second choice for picking up given discourse referents.

As non-novel indefinites are not ideal for picking up a given discourse referent, their presupposition is typically accomodated, i.e. the common ground is changed minimally so that it contains a discourse referent under the given description.

The adverbial quantifier quantifies over all contexts in which the presuppositions of the sentence are satisfied, i.e. over all ways of interpreting the discourse referent of the non-novel discourse referent (cf. (18)).

A non-novel indefinite can pick up an existing discourse referent. This avoids the requantification problem. The otherwise better option of using a definite NP does not exist here, as we don’t have a second NP, and a definite NP cannot be used to create the domain of quantification. Schematically:

- (21) *usually* $[a \textit{dog}_1]$ $[a \textit{dog}_1 [t_1 \textit{is intelligent}]]$
accomodated indefinite
presupposition picks up
introduces DR 1 DR 1

1.2 Proposal in greater detail

Interpretation of indefinites and adverbs of quantification

Interpretation of non-novel indefinites:

- (22) a. $[[a\ dog]_{1,NN}] = c\{g\ c\ | \ h\ c\ [DG(h_1)]\}$
 b. $[[a\ dog]_{1,NN} [t_1\ is\ intelligent]] = c\{g\ c\ | \ h\ c\ [DG(h_1)] \ IN(g_i)\}$

Interpretation of anaphoric definites, and their use:

- (23) $[[the\ dog]_i] = c\{g\ c\ | \ g\ c\ [DG(g_i)] \ i \ DOM(g)[DG(g_i)] \ g_i = g_i\}$

- (24) a. $c_0 + Mary\ has\ a\ dog_1\ and\ a\ cat_2.$
 $= \{h\ | \ g\ c_0[g_{<1,2}h\ DG(h_1)\ CT(h_2)\ HV(m,h_1)\ HV(m,h_2)]\} = c_1.$
 b. $c_1 + The\ dog_3\ is\ intelligent.$
 Choose index ? such that *the dog*₃ can be interpreted, here: ? = 1:
 $= \{h\ c_1\ | \ g\ c_1[DG(g_i)] \ i \ DOM(g)[DG(g_i)] \ g_i = g_i\} \ IN(h_1)\}$

Interpretation of adverbs of quantification, schematic:

- (25) $c + [usually](\ , \)$
 $= c + \text{most ways in which } c \text{ entails}$
 $\text{are ways in which } c \text{ entails } \text{ and } .$

Interpretation of adverbs of quantification, presupposition sensitive:

- (26) $MOST^*(g)(c, c')$ is defined iff $h\ c\ [g\ h]$ and $k\ c'\ [h\ k]$.
 If defined, it holds iff $MOST(\{h\ | \ k\ c\ [g\&h = k]\}, \{h\ | \ i\ c\ [h\ i]\})$

i.e. $MOST^*$ is interpreted with respect to an input assignment g , and establishes a relation between two contexts c and c' , where the assignments in c are extensions of g , and the assignments in c' are extensions of c . The relation holds if most increments h by which the assignments in c differ from g are contained in the assignments in c' .

- (27) $c_0 + USUALLY(\ , \) = \{g\ c\ | \ MOST^*(g)(\{g\}[\], \{g\}[; \])\}$

i.e. if an input context c is updated with *usually* $\alpha\ \beta$, then it will be restricted to those input assignments g for which it holds that most ways in which $\{g\}$ supports α are also ways in which $\{g\}$ supports β and β .

Accommodation of Presuppositions

Accommodation of the presuppositions of a context-change potential α at a context c involves a minimal change of c so that the presuppositions of α are satisfied.

The context change that we get for c with $c + \alpha = c'$ by minimally changing it (i.e. by accommodating the presuppositions of α in c) will be written $c(\alpha)$.

- (28) a. c **extends** c' , **satisfying** (the presuppositions of) α , iff
 $\neg c + \alpha$
 $\neg h\ c\ g\ c\ [g\ h]$
 b. c **extends** c' **minimally, satisfying** α , iff
 $\neg c$ extends c' , satisfying α ,
 \neg there is no c'' , $c' \subset c''$, such that c'' extends c' , satisfying α , and
 c extends c'' , satisfying α .
 c. c **extends** c' **properly, satisfying** α (rendered as $c = c'$)
 iff $c = c' \cup \{c' \mid c' \text{ extends } c' \text{ minimally, satisfying } \alpha\}$

That is, if $c + \alpha = c'$ and c'' , then c' is the most conservative change of c that satisfies the presuppositions of α . In particular, c' contains what is necessary to satisfy the presuppositions of α (a), but does not contain any excess information. This means that it does not introduce any unnecessary indices (b), and it does not make any unnecessarily specific claims about how the indices are anchored (c).

We have the following fact: If $1 \in \text{DOM}(c)$, then $c [[a\ dog]_{1,NN}] = c + [[a\ dog]_1]$. That is, accommodation of the non-novel indefinite *a dog* has the same effect as updating with the regular indefinite *a dog*.

Accommodating presuppositions in adverbial quantification

In $[A\ dog]_{NN}$ *is intelligent*, the adverbial restrictor is empty. Let 0 stand for the identity CCP, $0 = c[c]$. If the protasis of the adverbial quantifier is not filled explicitly (e.g. by an *if*-clause), 0 is the default. Then we have:

- (29) $c_0 + USUALLY(0, [[a\ dog]_{NN,1} [t_1\ is\ intelligent]])$

This cannot be interpreted as is, as the restrictor is empty. The restrictor can be filled by **accommodating** the presupposition of *a dog*_{NN,1}.

Three possible points of accommodation (cf. Heim (1983), van der Sandt (1992)): globally, intermediately, or locally.

- (30) a. $c + USUALLY(0, \alpha)$
 b. $= \{g\ c\ | \ MOST^*(g)(\{g\}[0], \{g\}[0; \])\}$
 c. $= \{g\ c\ | \ MOST^*(g)(\{g\}, \{g\}[\])\}$
 d. presuppositions of α are not satisfied in $\{g\}[\]$, which requires computation of $\{g\}+$.
 e. i) Global accommodation does not help:
 $c + USUALLY(0, \alpha)$
 $= \{g\ c\ | \ MOST^*(g)(\{g\}, \{g\}[\])\}$
 ii) Local accommodation does not help:
 $\{g\ c\ | \ MOST^*(g)(\{g\}, \{g\}[\])\}$
 iii) Intermediate accommodation helps:
 $\{g\ c\ | \ MOST^*(g)(\{g\}, g\ [\])\}$

With intermediate accommodation, the context of the protasis, $\{g\}$, is changed to the accommodated context g' , and g and the elements in g' will differ if the accommodation involves the introduction of new discourse referents.

- (31) a. $c_0 + \text{USUALLY}(0, [a \text{ dog}_{\text{NN},1} [t_1 \text{ is intelligent}]])$
 b. $= \{g \ c_0 \mid \text{MOST}^*(g)(\{g\}, \{g\}[a \text{ dog}_{\text{NN},1} [t_1 \text{ is intelligent}]])\}$
 c. Intermediate accommodation:
 $\{g \ c_0 \mid \text{MOST}^*(g)$
 $\quad (\{g\} [a \text{ dog}_{\text{NN},1} [t_1 \text{ is intell.}]]),$
 $\quad (\{g\} [a \text{ dog}_{\text{NN},1} [t_1 \text{ is intell.}]] [a \text{ dog}_{\text{NN},1} [t_1 \text{ is intell.}]])\}$
 d. $= \{g \ c_0 \mid \text{MOST}^*(g)$
 $\quad (\{h \mid g <_1 h \ \& \ \text{DG}(h_1)\},$
 $\quad (\{h \mid g <_1 h \ \& \ \text{DG}(h_1)\} [c\{g \ c \mid h \ c[\text{DG}(h_1)] \ \text{IN}(g_1)]])\}$
 e. $= \{g \ c_0 \mid \text{MOST}^*(g)(\{h \mid g <_1 h \ \& \ \text{DG}(h_1)\}, \{h \mid g <_1 h \ \& \ \text{DG}(h_1)\} \ \text{IN}(h_1))\}$
 f. $= \{g \ c_0 \mid \text{MOST}(\{h \mid k [g <_1 k \ \& \ \text{DG}(k_1) \ \ g \ \& \ h = k]\},$
 $\quad \{h \mid i [g <_1 i \ \& \ \text{DG}(i_1) \ \ \text{IN}(i_1) \ \ h \ \ i]\})\}$

Examples with non-empty protasis

Local accommodation of non-novel indefinite in the protasis

- (32) a. *If a dog_{NN} has blue eyes, it usually is intelligent.*
 b. $c_0 + \text{USUALLY}([a \text{ dog}_{\text{NN},1} [t_1 \text{ has blue eyes}]], [it_1 \text{ is intelligent}])$
 c. $= \{g \ c_0 \mid \text{MOST}^*(g)$
 $\quad (\{g\} [a \text{ dog}_{\text{NN},1} [t_1 \text{ has blue eyes}]],$
 $\quad (\{g\} [a \text{ dog}_{\text{NN},1} [t_1 \text{ has blue eyes}]]; [it_1 \text{ is intelligent}])\}$
 d. $= \{g \ c_0 \mid \text{MOST}^*(g)$
 $\quad (\{h \mid g <_1 h \ \ \text{DG}(h_1)\} [t_1 \text{ has blue eyes}],$
 $\quad (\{h \mid g <_1 h \ \ \text{DG}(h_1)\} [t_1 \text{ has blue eyes}]; [it_1 \text{ is intelligent}])\}$
 e. $= \{g \ c_0 \mid \text{MOST}^*(g)$
 $\quad (\{h \mid g <_1 h \ \ \text{DG}(h_1) \ \ \text{HBE}(h_1)\},$
 $\quad (\{h \mid g <_1 h \ \ \text{DG}(h_1) \ \ \text{HBE}(h_1) \ \ \text{IN}(h_1)\})\}$

Asymmetric readings (cf. Kadmon (1987)):

- (33) a. *If a f_{armer}_{NN} owns a d_{onkey}, he usually b_{éats} it.*
 ‘Most farmers that own a donkey beat it.’
 b. *If a f_{armer} owns a d_{onkey}_{NN} he usually b_{éats} it.*
 ‘Most donkeys owned by a farmer are beaten by him.’

Asymmetric readings arise because quantification is just over accommodated variables:

- (34) a. $c_0 + \text{USUALLY}([a \text{ farmer}_{\text{NN},1} \ a \ \text{donkey}_2 [t_1 \text{ owns } t_2]], [he_1 \text{ beats } it_2])$
 b. $= \{g \ c_0 \mid \text{MOST}^*(g)$
 $\quad (\{g\} [a \text{ farmer}_{\text{NN},1} \ a \ \text{donkey}_2 [t_1 \text{ owns } t_2]],$
 $\quad (\{g\} [a \text{ farmer}_{\text{NN},1} \ a \ \text{donkey}_2 [t_1 \text{ owns } t_2]]; [he_1 \text{ beats } it_2])\}$
 c. $= \{g \ c_0 \mid \text{MOST}^*(g)$
 $\quad (\{h \mid g <_1 h \ \ \text{FA}(h_1)\} [a \ \text{donkey}_2 [t_1 \text{ owns } t_2]],$
 $\quad (\{h \mid g <_1 h \ \ \text{FA}(h_2)\} [a \ \text{donkey}_2 [t_1 \text{ owns } t_2]]; [he_1 \text{ beats } it_2])\}$
 d. $= \{g \ c_0 \mid \text{MOST}^*(g)$
 $\quad (\{h \mid g <_1 h \ \ \text{FA}(h_1) \ \ \ k[h <_2 k \ \ \text{DO}(k_2) \ \ \text{OW}(k_1, k_2)],$
 $\quad \{h \mid g <_1 h \ \ \text{FA}(h_1) \ \ \ k[h <_2 k \ \ \text{DO}(k_2) \ \ \text{OW}(k_1, k_2) \ \ \text{BE}(k_1, k_2)]\})\}$

Cf. Chierchia (1992), who assumes that quantification is only over the “topical” parts in the protasis

Some consequences and predictions

Marking of non-novel indefinites

Crucial difference to association-with-focus theory: There is a special class of non-novel indefinites. They can be marked by deaccentuation / topic accent. But the association-with-focus theory explains the accent facts as well (focus marking of other constituents leads to deaccenting the indefinite). Is there evidence that special marking affects the indefinite NP?

Optional marking non-novel indefinites by a given (examples: BNC).

- (35) a. *But, however suggestive it may be, the fact that a given phenomenon is successfully predicted by a theory does not prove the theory to be correct.*
 b. *What limits a teacher wishes to set will depend entirely on her own intentions for a given student.*

Use of definite articles for indefinites to be interpreted in the restrictor of an adverbial quantifier or a generic sentence, e.g. in Modern Greek (cf. Newton (1979)), Spanish (cf. Laca (1990) for the data). Can be explained by assuming that the definite article serves to mark both definite NPs and non-novel indefinites.

- (36) a. *Los vaqueros mascan tabaco.*
 the cowboys chew tobacco
 ‘Cowboys usually chew tobacco.’
 b. *Los vaqueros mascan el tabaco.*
 the cowboys chew the tobacco
 ‘What cowboys usually do with tobacco is: they chew it.’

Differential object marking in Turkish, Persian (described as marking specificity):

- (37) a. *Kowboyeeha tanbako mijavand.*
 cowboys tobacco chew
 ‘Cowboys usually chew tobacco.’
 b. *Kowboyeeha tanbako-ra mijavand.*
 cowboys tobacco-OM chew
 ‘What cowboys usually do with tobacco is: they chew it.’

Use of topic markers in Japanese for indefinites in the restrictor of quantifiers.

- (38) *Taitei, midori no me o shita inu wa rikou de aru.*
 usually, green of eye Acc did dog(s) Top intelligent Decl is/are
 ‘Usually, a green-eyed dog is intelligent’

- (39) a. *Shin-nyuu-sei wa taitei yakyuu bou o kabu-tte iru.*
 newly-enter-student/s Top usually baseball cap/s Acc wear is/are
 ‘Most freshmen wear a baseball cap’
 b. *Yakyuu bou wa taitei shin-nyuu-sei ga kabu-tte iru.*
 baseball cap/s Top usually newly.enter-student/s Nom wear is/are
 ‘Most baseball caps are worn by a freshmen’,

Deaccented indefinites can be interpreted as anaphoric (Kerstin Schwabe), which is to expected for non-novel indefinites (but is disfavored because pronouns / definite NPs do a better job)

- (40) *Wenn ein Mann raucht, dann trinkt ein Mann auch.*
 If a man smokes then drinks a man too
 ‘If a man smokes, then he also drinks.’

Case study: Scrambling in German

Proposal: Non-novel indefinites can scramble:

- (41) a. *weil einer alten Dame_{1,NN} gewöhnlich eine Kätze_{t1} gehört*
 because an old lady (DAT) usually a cat (NOM) belongs
 ‘because most old ladies own a cat’
 b. *weil eine Kätze_{2,NN} gewöhnlich t2 einer alten Dame gehört*
 because a cat (NOM) usually an old lady (DAT) belongs
 ‘because most cats belong to an old lady’

Alternatives:

- Diesing (1992), existential closure over VP; scrambling allows indefinites to escape from the VP and get bound by the adverbial quantifier.
 Problem: deaccented indefinites within VP:
- (42) *weil ja doch eine Kätze gewöhnlich einer alten Dame gehört.*
- Rooth (1995), Krifka (1995), Lenerz (2001): indefinites that move out of the focus are interpreted in the restrictor, i.e. existential closure over focus. Cf. also prosody-based accounts: Neeleman and Reinhart (1998), Büring (2001).
 Problem: Presupposition-sensitivity to be analyzed as a different phenomenon.
 - de Hoop (1992): Weak indefinites (existential indefinites) cannot scramble. Problem (Frey (2001)): “narrow scrambling” of weak indefinites in
- (43) *weil die Polizei gestern Demonstranten₁ im Stadtpark t1 verhaftet hat.*
 ‘because the police arrested some protesters in the city park yesterday’

Is it necessary that non-novel indefinites scramble? Probably not, cf. (42). But there are base-generated positions that do not allow for non-novel indefinites (or “strong” NPs in general), e.g. after a manner adverbial, or in complex predicates (cf. Frey (2001)). Deaccenting is impossible in this position.

- (44) *weil Hans gewöhnlich sorgfältig ein Hémd bügelt / *ein Hémd b‘ügelt.*
 because Hans usually carefully a shirt irons
 ‘because Hans usually carefully irons a shirt’

Frey (2000) identifies an aboutness topic position in the German middle field, between left sentence bracket and the position for sentence adverbials. This position can house non-novel indefinites, but they don’t have to be realized there.

- (45) a. *weil Kinder vermutlich leicht Másern kriegen.*
 because children presumably easy measles get
 b. *weil vermutlich Kinder leicht Másern kriegen.*

Hence, non-novelty of indefinites should not be reduced to aboutness topics.

Binding options

von Stechow (1994) observes a contrast involving *unless*-conditionals. Explanation: non-novel indefinites accommodate, hence escape scope of negation.

- (46) a. *Unless Pedro owns a dònkey, he doesn’t beat it.*
 b. **Unless Pedro owns a dònkey, he doesn’t beat it.*
- (47) a. *If Pedro doesn’t own a dònkey, he doesn’t beat it.*
 b. **If Pedro doesn’t own a dònkey, he doesn’t beat it.*

Cataphora

[Chierchia, 1995 #6521], accent marks added:

- (48) a. *If it₁ is overcòoked, a hàmburger₁ usually doesn’t tástè good.*
 b. *If a bòy₁ líes to her₂, a gírl₂ won’t trúst him₁ anymore.*

Can be explained if we assume that non-novel indefinites are possible antecedents from the place where they are accommodated. Problem for subject-centered account of Chierchia:

- (49) If a boy lies to her, he risks losing a girlfriend.

A motivation for deaccenting

Bartels and Merin (1997): The general function of deaccenting (what Bartels & Merin identified as L*H⁻ tone) is to indicate transfer of authority of referent choice from the speaker to the hearer. In the case of indefinites this means that it is granted to the hearer to select an entity that satisfies the description. This relates to the way how universal statements are analyzed in game-theoretic semantics: To prove $\forall x [x]$, the speaker has to prove $[a]$ for some object a that can be chosen by a malevolent hearer, or “nature”. This idea can be generalized for other quantificational forces. For example, to prove USUALLY(x) $[x]$, the speaker has to prove that $[a]$, where a is chosen by the opponent, is true for most choices of a . In contrast, for the existential interpretation $\exists x [x]$ it remains in the authority of the speaker to choose an instantiation a such that $[a]$, and this situation is not marked by L*H⁻ but by H*L⁻.

Non-novel indefinites and specific indefinites

Fodor and Sag (1982) show that such NPs can scope out of syntactic islands and claim that they are referential and hence appear to have widest scope. Abusch (1993-1994) argues that the referential analysis of specific indefinites cannot be correct, as there are readings in which they are still in the scope of another operator:

- (50) Every professor rewarded every student who read *a book he had recommended*.
'For every professor x: There is a book that x recommended, y,
and x rewarded every student that read y.'

Cresti (1995) has developed an analysis of specific NPs as **topical**, where topichood introduces a certain **presupposition**, and this presupposition can be **accommodated** globally, locally, or on an intermediate level, as in (50). The presupposition introduced by an indefinite specific NP like [*a student*]_i is essentially that the variable assignment must satisfy the condition [*student*](x_i), where x_i is the variable corresponding to the index i (see Cresti 1995 p. 164 for details).

Problem: The notion of topic applied here is perhaps wider as the notion of aboutness topics, identified e.g. by Japanese *wa* and the German topic position because non-novel NPs don't have to be marked as topics.

Difference between non-novel indefinites interpreted in the restrictor of a quantifier and as specific NPs: Bare NPs can easily act in the first role, but are problematic in the second:

- (51) a. *Fréshmen usually wear bàseball caps*_{NN}.
'Most baseball caps are worn by freshmen.'
b. *Every prof rewarded every student who read books he had recommended*.
'For every professor x: x rewarded every student that read some books or other that x had recommended.'

2 References

- Abusch, Dorit. 1993-1994. The scope of indefinites. *Natural Language Semantics* 2:83-135.
- Bartels, Christine, and Merin, Arthur. 1997. Decision-theoretic semantics for intonation.
- Büring, Daniel. 2001. What do definites do that indefinites definitely don't? In *Auditor vox sapientiae. A Festschrift for Arnim von Stechow*, eds. Caroline Féry and Wolfgang Sternefeld, 70-100. Berlin: Akademie Verlag.
- Chierchia, Gennaro. 1992. Anaphora and dynamic binding. *Linguistics and Philosophy* 15:111-183.
- Cresti, Diana. 1995. Indefinite topics, MIT: Ph.D. dissertation.
- de Hoop, Helen. 1992. Case configuration and noun phrase interpretation, University of Groningen: Ph. D. Dissertation.
- Diesing, Molly. 1992. *Indefinites*. Cambridge, MA: MIT Press.
- Fodor, Janet Dean, and Sag, Ivan A. 1982. Referential and quantificational indefinites. *Linguistics and Philosophy* 5:355-398.
- Frey, Werner. 2000. Über die syntaktische Position des Satztopiks im Deutschen. In *Issues on Topics. ZAS Papers in Linguistics* 20, eds. Kerstin Schwabe, André Meinunger and Dieter Gasde, 137-172. Berlin: ZAS.
- Frey, Werner. 2001. About the whereabouts of indefinites. *Theoretical Linguistics* 27:137-161.
- Heim, I. 1983. On the projection problem for presuppositions. Paper presented at *West Coast Conference on Formal Linguistics*, Stanford.
- Horn, Laurence R. 1984. Toward a new taxonomy for pragmatic inference: Q-based and R-based implicature. In *Meaning, form, and use in context: Linguistic applications*, ed. D. Schiffrin, 11-89. Washington, D.C.: Georgetown University Press.
- Kadmon, Nirit. 1987. On unique and non-unique reference and asymmetric quantification., Dept. of Linguistics, University of Massachusetts at Amherst: Ph.D. dissertation.
- Kasper, Walter. 1992. Presupposition, composition, and simple subjunctives. *Journal of Semantics* 9:307-331.
- Krifka, Manfred. 1995. Focus and the interpretation of generic sentences. In *The Generic Book*, eds. Gregory N. Carlson and Francis Jeffrey Pelletier, 238-264. Chicago: Chicago University Press.
- Krifka, Manfred. 2001. Non-novel indefinites in adverbial quantification, eds. Cleo Condoravdi and Gerard Renardel der Lavalette, 1-40. Stanford: CSLI Press.
- Laca, Brenda. 1990. Generic objects: Some more pieces of the puzzle. *Lingua* 81:25-46.
- Ladd, D. Robert. 1980. *The structure of intonational meaning: Evidence from English*. Bloomington: Indiana University Press.
- Lenerz, Jürgen. 2001. Word order variation: Competition or co-operation. In *Competition in syntax*, eds. Gereon Müller and Wolfgang Sternefeld, 249-281. Berlin: Mouton de Gruyter.
- Neeleman, Ad, and Reinhart, Tanya. 1998. Scrambling and the PF interface. In *The projection of arguments: Lexical and compositional factors*, eds. Miriam Butt and Wilhelm Geuder, 309-353. Stanford: CSLI Publications.
- Newton, B. 1979. Scenarios, modality and verbal aspect in Modern Greek. *Language* 55:139-167.
- Percus, Orin J. 1997. Aspects of A, Department of Linguistics and Philosophy, MIT.
- Rooth, M. 1985. Association with focus, University of Massachusetts at Amherst: Ph.D. dissertation.
- Rooth, Mats. 1995. Indefinites, adverbs of quantification and focus semantics. In *The Generic Book*, eds. Gregory N. Carlson and Francis Jeffrey Pelletier, 265-291. Chicago: Chicago University Press.
- Rooth, Mats. 1999. Association with focus or association with presupposition? In *Focus. Linguistic, cognitive and computational perspectives*, eds. Peter Bosch and Rob van der Sandt, 232-246. Cambridge: Cambridge University Press.
- van der Sandt, Rob. 1992. Presupposition projection as anaphora resolution. *Journal of Semantics* 9:332-377.
- von Fintel, Kai-Uwe. 1994. Restrictions on quantifier domains, University of Massachusetts: Ph.D. dissertation.
- Yeom, Jae-II. 1998. *A presuppositional analysis of specific indefinites. Common grounds as structured information states*. New York: Garland.