

Topics in the Lexical Semantics–Morphosyntax Interface

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“Restriction” vs. “Saturation”: (Pseudo-)Incorporation,
between complementation and modification

Outline for Part 5

- ▶ (Pseudo-)Incorporation: A brief and incomplete overview
- ▶ Basic approaches to (pseudo-)incorporation.
 - ▶ Change the type of the verb (e.g., Van Geenhoven 1992, 1998; McNally 1995; Dayal 2011)
 - ▶ Change the composition rule (e.g., Farkas and de Swart 2003; Chung and Ladusaw 2004)
 - ▶ Go “kind-level” (\approx Carlson 2003)
- ▶ Implications

(Pseudo-)Incorporation and noun incorporation

Mithun (1984); Van Geenhoven (1998); Chung and Ladusaw (2004); see Borik and Gehrke (2015) for overview/references

- ▶ Internal argument expressed non-canonically:
Detransitivize verb, other changes (e.g. West Greenlandic, Van Geenhoven 1998: 13-15)

- (1) a. Angunguu-p aalisagaq neri-v-a-a.
Angunguaq-**ERG** fish-**ABS** eat-IND-**[+tr]**-3SG.3SG
'Angunguaq ate the/a particular fish.'
- b. Angunguaq aalisagakka-mik neri-v-u-q.
Angunguaq-**ABS** fish-**INST.SG** eat-IND-**[-tr]**-3SG
'Angunguaq ate fish.'
- c. Angunguaq eqalut-tur-p-u-q.
Angunguaq-**ABS** **salmon**-eat-IND-**[-tr]**-3SG
'Angunguaq ate salmon.'

(Pseudo-)Incorporation just in syntax

Farkas and de Swart (2003); Dayal (2011); Espinal and McNally (2011), a.o.

- ▶ Internal argument expressed non-canonically:
Bare when article normally required; limited modification allowed (Espinal and McNally 2011)

- (2)
- a. Tiene una pareja
 - b. Tiene pareja
 - c. Imaginó ??(una) pareja
 - d. Tiene una pareja estable / alta
 - e. Tiene pareja estable / ??alta

(Pseudo-)Incorporation and “extra” meaning

Dayal (2011: 136f.): “[T]he Hindi incorporated nominal cannot be [a noun] but must be [a phrase]. . . . Consider . . .

anu sirf **puraanii** **kitaab** becegii
Anu only old book sell-FUT
'Anu will only sell old books.'

. . . Of course, there are certain types of modification and conjunction that are not acceptable in incorporation. For example, [the above] cannot have a modifier like *bhaarii* ‘heavy’. This is because **modification must preserve prototypicality**, and while old books can enter into a prototypical relation with *sell*, heavy books cannot.”

(Pseudo-)Incorporation and “extra” meaning

Different languages propose similar, if not identical, requirements as does Hindi; productivity of incorporation varies.

- ▶ Danish (Asudeh and Mikkelsen 2000): *købte hus* / ??*blyant*
'bought house / ??pencil'
- ▶ Spanish/Catalan (Espinal and McNally 2011): “the BN is licensed only if, in the specific context of use, the verb phrase denotes a **characterizing property** of the external argument....not necessarily a prototypical, stereotypical or institutionalized property...”

(Pseudo-)Incorporation and discourse reference

The (pseudo-)incorporated nominal varies in licensing discourse anaphora.

- ▶ West Greenlandic, Chamorro (Chung and Ladusaw 2004): anaphora OK
- ▶ Hindi, Spanish/Catalan, Hungarian (Farkas and de Swart 2003): anaphora sometimes OK

(3) Avui porta faldilla. ??La hi vam regalar l'any passat. [cat.]
today wear skirt it her go-1PL give year last
'Today she's "skirt-wearing". ??We gave it to her last
year.'

Questions

- ▶ What do detransitivization, bareness tell us about the combination of verb and nominal?
- ▶ Where does the “extra” meaning come from?
- ▶ Why is discourse anaphora limited in some languages (if not others)?

Analysis 1: Change the type of the verb

Van Geenhoven (1998) [vG98], Dayal (2011) [D11]

- ▶ V takes a property-type internal argument $\rightarrow V[-tr]$
- ▶ N denotes a property, may modify V \rightarrow “extra meaning”
- ▶ Result may have variable for noun referent or not \rightarrow anaphora

- (4)
- a. $V_{[+tr]}: \lambda y \lambda x. \mathbf{verb}(x, y)$
 - b. $V_{[-tr]}: \lambda P \lambda x \exists y. \mathbf{verb}(x, y) \wedge P(y)$ [vG98]
 - c. $V_{[-tr]}: \lambda P \lambda x \lambda e. \mathbf{P-verb}(e) \wedge \mathbf{Agent}(e) = x$ [D11]
 - d. N: **noun**
 - e. $[_{VP} V N]: \lambda x \exists y. \mathbf{verb}(x, y) \wedge \mathbf{noun}(y)$
 - f. $[_{VP} V N]: \lambda x \lambda e. \mathbf{noun-verb}(e) \wedge \mathbf{Agent}(e) = x$

Comments on Analysis 1

- ▶ In some languages, the verb continues to appear syntactically transitive (e.g., Spanish, Catalan; Espinal and McNally 2011)
- ▶ The account of “extra” meaning really only might follow on Dayal’s analysis; predicts a correlation between possibility of discourse anaphora and “extra” meaning that needs testing.
- ▶ In any case, Dayal’s account labels the extra meaning question more than it solves it.

Analysis 2a: Change the composition rule

Chung and Ladusaw (2004)

- ▶ V denotation invariant, N denotes a property
- ▶ Ad hoc rule *restricts* internal argument of V; existential closure *saturates* the argument
- ▶ Result identical to Van Geenhoven's analysis

- (5)
- Verb_[+tr]: $\lambda y \lambda x. \mathbf{verb}(x, y)$
 - Noun: **noun**
 - $[_{VP} V N]$: **RESTRICT**($\lambda y \lambda x. \mathbf{verb}(x, y)$, $\lambda y. \mathbf{noun}(y)$)
 $= \lambda y \lambda x. \mathbf{verb}(x, y) \wedge \mathbf{noun}(y)$
 - EC($\lambda y \lambda x. \mathbf{verb}(x, y) \wedge \mathbf{noun}(y)$) =
 $\lambda x \exists y. \mathbf{verb}(x, y) \wedge \mathbf{noun}(y)$

Analysis 2b: 2 kinds of variables, 2 rules

Farkas and de Swart (2003)

- ▶ Uses Discourse Representation Theory (Kamp 1981)
- ▶ Distinguish *thematic variables* from *discourse referents*
- ▶ Incorporation *unifies* thematic variables \approx **RESTRICT**
- ▶ Thematic variables can, but needn't, be instantiated by discourse referents.

Analysis 2b: Examples

Inspired in Farkas and de Swart (2003)

Ana tiene pareja:

u_x
$\mathbf{a} = u_x$ $\mathbf{have}(e)$ $\mathbf{haver}(e) = u_x, \mathbf{havee}(e) = y$ $\mathbf{partner}(y)$

Ana tiene una pareja:

u_x, u_y
$\mathbf{a} = u_x$ $\mathbf{have}(e)$ $\mathbf{haver}(e) = u_x, \mathbf{havee}(e) = u_y$ $\mathbf{partner}(u_y)$

Comments on Analysis 2

- ▶ Chung and Ladusaw's version does not explain “extra” meaning or variability in discourse anaphora.
- ▶ It does work for specific cases that other analyses do not account for: When the verb remains transitive and allows a “doubled” complement with incorporation, as in Chamorro.

(6) Gai-[ga] un galagu ennao na patgun.
agr.have-pet a dog that L child
'That child has a pet dog.'

- ▶ Farkas and de Swart's version can account for discourse anaphora and doubled complements, but says little about “extra meaning.”

Analysis 3: Go “kind-level”

Carlson (2003)

[T]he VP is the domain of a context-free interpretive mechanism specifying an event type, which is then the input to the usual context-sensitive propositional semantics generally assumed for all levels of the sentence. That is, something fundamentally different goes on within the VP that does not go on ‘above’ the VP it is only information about types/properties that appears there and not information about (contingent) particulars. (Carlson 2003:198)

- ▶ Incorporated (and other related) nominals combine with verbs to form event subkind descriptions:

$$(7) \quad [[[VP \text{ collect stamps}]]] \leq_{\text{subkind}} [[\text{collect}]]$$

Comments on Analysis 3

- ▶ Intuition similar to that behind Asher's analysis of verb-complement relations.
- ▶ VP counterpart of McNally and Boleda's (2004) account of modification by relational adjectives.
- ▶ No details offered about how to make the analysis work.

Let's bring this all together

- ▶ Incorporation reveals a tension:
 - ▶ Tradition of treating verbs as functions that get saturated by their complements.
 - ▶ Evidence that some complements behave more like modifiers than arguments.

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- ▶ Non-compositional, “extra meaning” effects emerge especially in the formation of event descriptions.

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- ▶ Non-compositional, “extra meaning” effects emerge especially in the formation of event descriptions.
- ▶ Carlson's use of kinds \approx rich type approach from Parts 3, 4.

Summary

- ▶ (Pseudo-)Incorporation: rich area for further descriptive research.
- ▶ Though polysemy has not played a role in the discussion, data and analyses recall issues we have seen with verb complementation, adjective modification.
- ▶ Farkas and de Swart's and Carlson's analyses: More evidence that two distinct compositional processes are in play:
 - ▶ One to combine lexical contents.
 - ▶ One to introduce and relate the entities that we refer to and quantify over.

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