

March 14, 2006

CLASSES 11-13: QUANTIFICATION [summary]

OVERVIEW

- the *semantics of quantifiers* (= expressions that indicate the quantity of something)
- (i) *all, no(N/body/one), some, several, (a) few, many, much, most N*, etc. (!)
- (ii) *between X and Y Ns, exactly X Ns, cardinal number Ns*, etc. (!)
- (iii) *a(n) N, the N, bare plural Ns, proper names* (?)

GENERALIZED QUANTIFIER THEORY (GQT)

(1) *Semantic Composition*

When two phrases combine, their meanings may be combined by (S) or (M):

(S) One meaning may saturate the other.

(M) If both phrases are predicates, one may modify the other to produce a new predicate.

(2) Every baby cried.

(3) *Meanings of Parts*

<u>word / phrase</u>	<u>:</u>	<u>meaning</u>	<u>:</u>
<i>cried</i>		a property (= unsaturated proposition)	
<i>baby</i>		a property (= unsaturated proposition)	
complete sentence		a (complete / saturated) proposition	

- what does all this tell us for the meaning of *every baby cried*?
- call quantifiers *properties-of-properties* (= “Generalized Quantifier Theory”):
“individuals are to properties as properties are to quantifiers” (PHP: 116)
- apply this approach to proper names and the other (?) -elements from above?

GQT tells us certainly something interesting about the *meaning of determiners*.

- for example: *every N* describes a property *P* if *P* is true of all the *Ns*

NP CONJUNCTION

FEEL FREE TO IGNORE THIS SECTION FOR EXAMINATORY PURPOSES.

NEGATIVE POLARITY ITEMS (NPIs)

NPIs: *ever, any, at all, the slightest difference, yet, a bit, give a damn, red cent, ...*

NPIs seem to be licensed by a negative expression that scopes over them:

- (4) a. Shelby won't ever bite you. (4') a. *Shelby will ever bite you.
 b. *Nobody* has any money. b. *Noah has any money.

But there are other licensors, such as questions, *if*-clauses, and certain quantifiers:

- (5) a. Does Noah have any money?
 b. If Shelby ever bites you, I'll put him up for adoption.
 c. Every cat who has ever scratched a dog feels the admiration of other cats.
 d. *Some cat who has ever scratched a dog feels the admiration of other cats.

- consider structures of the sort: [DETERMINER NOUN MODIFIER] PREDICATE
- relevant class of NPI-licensing quantifiers: *downward* vs. *upward entailment*

Since the *meaning of quantificational determiners* is doubly unsaturated for properties, we should consider both properties it combines with.

- [DETERMINER PROPERTY #1] PROPERTY #2

(6)		<i>First property</i>		<i>Second property</i>	
		↓ entailing	↑ entailing	↓ entailing	↑ entailing
	<i>every</i>	Yes	No	No	No
	<i>no</i>	Yes	No	Yes	No
	<i>some</i>	No	Yes	No	Yes
	<i>three</i>	No	Yes	No	Yes

Conclusion: NPIs are licensed by a downward-entailing environment.

QUANTIFIERS IN OBJECT POSITION

- (7) a. Only John₁ loves his₁ mother →
 b. Only John₁ [t₁ loves his₁ mother]
- (8) a. Mary loves every baby₁ →
 b. Every baby₁ [Mary loves t₁]
- (9) a. Every boy loves some girl. scopal relations: ∀ > ∃, ∃ > ∀
 b. Some girl is loved by every boy. scopal relations: *∀ > ∃, ∃ > ∀

- feel free to ignore the alternative (non-movement) option for object quantifiers