



# “Each of us must climb our separate mountain”

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### The Problem

#### 1<sup>st</sup> person pronouns as bound variables

Cases discussed in the previous literature:

- **Focus particle:**  
*Only I got a question / understood*  
 $\forall x(x \text{ got a question } x \text{ understood} \rightarrow x = \text{speaker})$
- **Floated quantifier:**  
*We all think we can win the nomination*  
 $\forall x(x \in \text{WE} \rightarrow x \text{ thinks that } x \text{ can win})$

Partee 1989, Heim early '90s, 2005, 2007, Kratzer 1998, 2008, Schlenker 2002, 2003, 2005a,b, Rullmann 2003, 2004, among others.

#### Theoretical challenges

**Person:** How can a 1<sup>st</sup> person pronoun be a variable that ranges over entities other than the speaker?

**Number:** How can a plural pronoun be a variable that ranges over atomic entities?

#### Inert features?

Syntactic approaches (von Stechow 2003, Kratzer 1998, 2008; Heim 2005/07):

- features may be present at PF but absent at LF
- syntactic feature manipulation mechanism (“feature checking”, “feature transmission”)

#### New data: each of us

- (1) *Each of us* -- and the Florida Supreme Court has said this -- has a right to control *our* own body.
- (2) But *each of us*, as an individual, faces *our* own edge.
- (3) THE BANK TELLER explores the desire within *each of us* to overcome *our* isolation and to see and be seen by the other in a relation of authentic connectedness.
- (4) *Each of us* has experienced a strong sense of pride as an educator when a student says that *we* did an excellent job of teaching and motivating him or her to learn.
- (5) *Each of us* has *our* own philosophy regarding how to help India.
- (6) *Each of us* must climb *our* separate mountain To reach at last *our* own extended view.

#### Problem for syntactic approaches

- verb agreement = 3<sup>rd</sup> person singular!

*Each of us thinks we are smart*

### The Solution

#### Semantic approach

- person/number features are never inert
  - no syntactic feature manipulation
  - person/number features impose **presuppositions**
- Cooper 1983, Dowty & Jacobson 1989, Heim & Kratzer 1998, Schlenker 2002, 2003, 2005, Sauerland 2002, 2003, 2004, Heim 2005, 2007, among others

### Semantics of We

#### Accounts for

- each of us (*Each of us thinks we can win*)
- floated quantifiers (*We all think we can win*)

#### Ingredient 1

Plural pronouns are semantically number neutral: they range over non-empty sets, including singleton sets

*Both candidates think they can win the nomination*

*Most people who think they have common interests become friends*

*None of the students claimed they had solved the problem*

Rullmann 2003; see also McCawley 1968, Sauerland, Andersen & Yatsuhiro 2006

#### Ingredient 2

Nunberg (1993): indexicals have

- deictic component
- **relational** component
- classificatory component (e.g., animacy, gender)

#### Proposal

*We* is a variable ranging over non-empty sets of entities that stand in a (reflexive) relation  $R_c$  to the speaker:

$\|we\|^{c,g} = g(i)$  if  $g(i) \in \text{PLUR}$   
and  $\forall x \in g(i): R_c(x, \text{speaker}(c))$   
(otherwise undefined)

#### Challenges met

*We* ranges over subsets of the speaker’s “associates”:

- Person:** these subsets do not need to contain the speaker
- Number:** these subsets may be singletons

#### Additional pragmatic requirement

When *we* is free it picks out the maximal set that meets its presupposition. Since  $R_c$  is reflexive, this includes the speaker.

### Semantics of Focus

#### Accounts for

- focus particles (*Only/Even I think I can win*)
  - ellipsis (*I think I can win and so do you*)
- Schlenker 2003, Déchaine and Wiltschko 2006, Roeper n.d.

#### Proposal

In the calculation of the focus-semantic value (the set of alternatives) the presuppositions of pronouns are ignored.

See also Jacobson 2007

#### Ordinary semantic value:

$\|I\|^{c,g} = g(i)$  if  $g(i) \in \text{SING}$  and  $g(i) = \text{speaker}(c)$   
(otherwise undefined)

#### Focus semantic value:

$\|I\|^{c,g} = g(i)$

#### Some consequences

Presuppositions still present in ordinary semantic value:  
# *Only I love his mother* (no bound reading)

Contrast pointed out by Heim (2005, 2007):

*Only I did my homework*  
# *Nobody but me did my homework* (no bound reading)

### I vs. We

*I* can be bound with focus particle, but not with *each of us*:  
# *Each of us thinks I'm smart* (no bound reading)

Explained by the proposed account: *I* does not involve  $R_c$ .

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