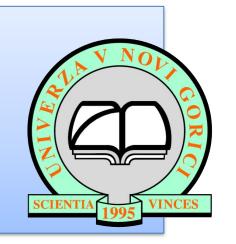


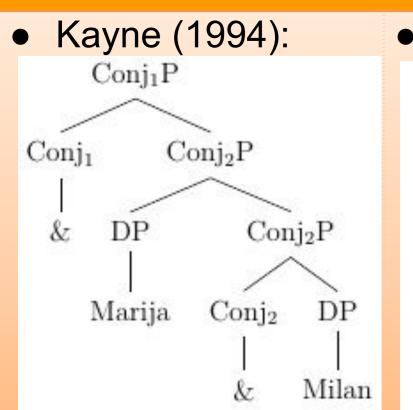
# **Distributive Binding**

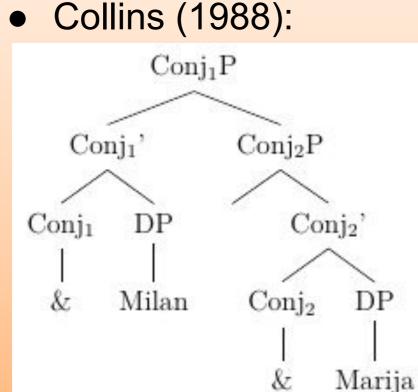
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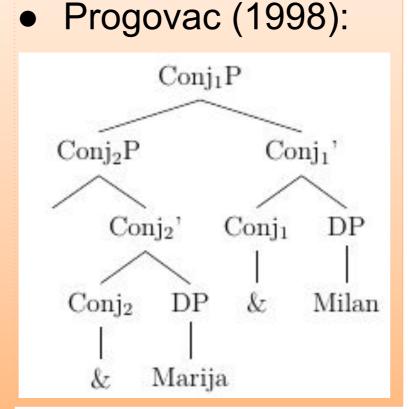
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- Binding requires C-command
  - [Peter, [saw [himself, [in the mirror]]]]
- This explains why only the entire coordination can bind the anaphor:
- (1) [Marija<sub>1</sub> i Milan<sub>2</sub>]<sub>3</sub> ja sakaat svojata<sub>3/\*1/\*2</sub> kjerka. Mac. Marija & Milan her love refl-poss daughter "Marija and Milan love their daughter."
- Interestingly, in double coordination constructions, which Progovac (1998a, 1998b) calls conjunction doubling.
   (e.g. & Peter & Mary) such binding is possible in Macedonian
- (2) [I Marija<sub>1</sub> i Milan<sub>2</sub>]<sub>3</sub> ja sakaat svojata<sub>3/1/2</sub> kjerka. Mac & Marija & Milan her love refl-poss daughter "Both Marija and Milan love their daughter."
- Given the structure of (double) coordination construction, such binding should not be possible:







Mac.

- Neither DP<sub>1</sub> Marija nor DP<sub>2</sub> Milan c-command out from the complex ConjP, not even if one assumes Kayne's (1994) c-command (that allows specifiers to c-command out)
- One of the conjuncts is always embedded inside two ConjPs
- At least one of the conjuncts is a complement of the coordinator, which means it cannot c-command out
- But given the data in (2), both conjuncts should be able to bind.
- Facts like (2) are observed in Macedonian & Slovenian
- o and actually also in (many) other languages

#### This is not an instance of clausal coordination:

- Aoun, Benmamoun, & Sportiche (1994) propose clausal coordination structure for closest conjunct agreement cases.
  - Clausal coordination would explain binding as within each conjunct, the anaphor is bound by the subject ... BUT:
  - Agreement on the verb in (2) is plural, while clausal coordination would predict singular agreement:
- (3) [I Filip<sub>1</sub> i Petar<sub>2</sub>]<sub>3</sub> ja sakaat svojata<sub>3/1/2</sub> kjerka. & Filip & Petar her love.3pl refl-poss daughter. "Both Filip and Petar love their job."

This facts are the same even with coordinated personal pronouns

 In case number agreement could be tricked in some way, person agreement seems less likely to be tricked:

(4)  $[I ja_1 i ti_2]_3$  ja sakame svojata<sub>3/1/2</sub> kjerka. Mac.

& I & you her love.1pl refl-poss daughter "Both I and you love ¿our? daughter."

"I love my daughter and you love your daughter."

## These facts exist also with other types of binding:

- object-bound possessive pronouns
- (5)Marija go pretstavi [na Petar<sub>i</sub> i na Filip<sub>j</sub>]<sub>k</sub> negoviot<sub>\*i/\*j/k</sub> protivnik. Marija him introduce to Peter & to Filip his oponent 'Marija presented Peter and Filip to his oponent.'
- (6) Marija go pretstavi [i na Petar, i na Filip,] negoviot, protivnik. Marija him introduce & to Peter & to Filip his oponent 'Marija presented both Peter and Filip to his oponent.'

And extend outside of binding to control (not clear this is really control as Macedonian doesn't have infinitival clauses, but it works like that with proper control in Slovenian):

- (7) Filip im reče na [Petar, i Marko] da go položat svojot, ispit. Filip them says to Peter & Marko that it pass refl-poss exam 'Filip told Peter and Marko to pass their exam.'
- (8) Filip im reče [i na Petar, i na Marko,], da go položat svojot, ispit. Filip them says & to Peter & to Marko that it pass refl-poss exam 'Filip told Peter and Marko to pass their exam.'

### Parallelism between "Both-And" and "And-And":

Progovac (1999a, 1999b) and Kayne (1994) treat both-and and and-and constructions as parallel.
 Progovac (1999a, 30):

The following pair cannot imply *together*, only *each*.

(14) a. I Marija i Petar su oprali sudove & Marija & Petar have.3pl washed.3pl dishes

b. Both Mary and Peter washed up the dishes.

The following pair however can imply *together*.

(15) a. Marija i Petar su oprali sudove.

Marija & Petar have.3pl washed.3pl dishes

b. Mary and Peter washed up the dishes.

#### Kayne (1994, 66):

- (15) a.\*Both John and Bill collided.
  - b. Both John and Bill know French.
- (16) a.\*I compared both John and Bill.
  - b. I saw both John and Bill.

**Progovac (1999b)** proposes an economy-based principle: "n-Coordination: Where *n-coor* is unspecified for the number of events/states, (*n*+1)-*coor* necessarily implies multiple-events".

Kayne (1994) takes a distributor-centered approach:

- A. If both precedes a coordinated phrase 'X & Y', it necessarily implies a distributive reading. The distributor can be abstract if needed, with predicates that only allow the distributive reading.
- B. In languages with '& X & Y' constructions, where the conjunct precedes the conjunction, the first conjunct acts as the distributor.
  - a. Kayne makes a prediction in languages where the conjunct follows the conjunction, no such distributive reading is found (e.g. Japanese)
- Neither Progovac nor Kayne mention binding.
  - We adopt Heim and Kratzer's (1998) binding procedure by which the QNP QRs at LF. By doing so, it leaves behind a trace in the original site and the index of the moved QNP (in our case, the indices of the NPs coordinated in the structure) adjoins to the sister node of the landing site - forming a predicate abstract. Consequently, we form a predicate abstract and we have modified variable assignment.
  - Therefore, what we have is a case of semantic binding which Heim and Kratzer (1998, 263) define as "A DP **a** semantically binds a DP **b** (in the derivative sense) iff **b** and the trace of **a** are (semantically) bound by the same variable binder.
- Distributive binding is really just bound variable reading as in:
   (17) [Site velosipedisti], go pazat svojot, točak.
   All+the cyclists it look-after refl-poss bicycle
   'Each cyclist takes care of his bike.'
   The parallelism with both-and construction should not be just in:
- The parallelism with both-and construction should not be just interpretational, but also structural – they both have a universal quantifier.
- The head of the double-coordinator structures is a null universal quantifier, while the two coordinated noun phrases act as the restrictor of the universal quantifier. The universal quantifier is the head of the entire coordination phrase.
  - Contra Progovac: "both/all" does not sit in the position of the first coordinator;
  - Contra Kayne: "the silent distributor" is not the first coordinator.

 $\operatorname{ALL} \operatorname{Conj_1P}$   $\operatorname{Conj_2P} \operatorname{Conj_1'}$   $\operatorname{Conj_2} \operatorname{DP} \operatorname{Conj_1} \operatorname{DP}$   $\left| \quad \quad \quad \mid \quad \quad \mid \quad \quad \mid$ & Marija & Milan

1<sup>st</sup> conjunct c-commands the 2<sup>nd</sup> in regular coordinations:

- every child & his mom

but not with doubles coordinator:

- \*&/both every child & his mom
 →the complement of the silent ALL is a Progovac-type coordination struc.

Aoun, J, E Benmamoun, & D Sportiche. 1994. "Agreement, word order, and conjunction in some varieties of Arabic." LI: 195-220. Collins, C. (1988). Conjunction adverbs. Unpublished manuscript. Heim I. & A. Kratzer. 1998. Semantics in Generative Grammar. Oxford: Blackwell. Kayne, R S. 1994. The antisymmetry of syntax. MIT Press. Progovac, L. 1998. Structure for coordination. Glot 3.7 (1998): 3-6. Progovac, L. 1999a. Conjunction Doubling and 'Avoid Conjunction' Principle. In M. Dimitrova-Vulchanova and L. Hellan (eds.) Topics in South Slavic Syntax and Semantics. Benjamins: 25-41. Progovac, L. 1999b. Events and Economy of Coordination. *Syntax* 2: 141-159.