

Different as “Internal” Anaphor

- (1) a. John read a book. Fred read a different book. #**internal**
 b. Every boy read a different poem. **internal**
 c. The boys read a different poem. #**internal**
 d. The boys read different books. **internal**

Observation: Internal *different* can associate across intervening distributors

- (2) The boys gave the girls different poems
 (3) Every boy gave every girl a different poem
 (4) Each traffic engineer insisted that every intersection she controlled had to have a different speed at which its lights changed.
 (5) It’s a disaster when a news anchor interviews a pundit who has recently appeared on a competitor’s network. So during an election year, each news anchor makes sure she interviews a different expert from each party.

Generalized AwD

- **Association with Distributivity** (AwD; Brasoveanu 2011): distributive quantifiers routinely duplicate discourse information, and thereby make available *pairs* of individuals

John ate each meal in a different room:

$$[j] \rightarrow \left\{ \left\langle [j \ b], [j \ l] \right\rangle \right\} \rightarrow \left\{ \left\langle [j \ b \ r_1], [j \ l \ r_2] \right\rangle \right\}$$

- **Quantifier-Internal Anaphora:** *different* merely checks that the copies opened up by the distributor differ in the relevant index

- **The problem:** in Brasoveanu, there is only one distributive channel (roughly, the second column), and each distributor overwrites it. *Incorrectly predicts (3)–(5) are unambiguous.*

- **AwD Generalized:** allow each distributor to introduce a new point of pairwise variation, and then tell *different* where to look to make the appropriate comparison

Fragment

Building on Brasoveanu 2011 and de Groote 2006; see B&B (to appear) for full details.

- every**ⁿ $\lambda PQck . (\forall x, y, x \neq y . P n c' T \rightarrow (P n ; Q n) c' T) \wedge k c$, where $c' = [c_1^{x/n}, c_1^{y/n}, \dots, c_{|c|}^{x/n}, c_{|c|}^{y/n}]$
aⁿ $\lambda PQck . \exists x_1, \dots, x_{|c|} . (P n ; Q n) c' k$, where $c' = [c_1^{x_1/n}, \dots, c_{|c|}^{x_{|c|}/n}]$
and (;) $\lambda p q c k . p c (\lambda c' . q c' k)$ **diff**_{ij} $\lambda P n . P n ; (\lambda c k . (c'_{1,2} \neq c'_{1,4}) \wedge k c)$
boy $\lambda n c k . (\forall i \in c . i_n \in \text{boy}) \wedge k c$ **poem** $\lambda n c k . (\forall i \in c . i_n \in \text{poem}) \wedge k c$
read $\lambda n m c k . (\forall i \in c . \langle i_n, i_m \rangle \in \text{read}) \wedge k c$ **give** $\lambda l n m c k . (\forall i \in c . \langle i_l, i_n, i_m \rangle \in \text{give}) \wedge k c$

Derivations

- (6) John read a poem. Fred read a different poem.

$$\left(\text{john}^1 (\lambda m . (\text{a}^2 \text{poem}) (\lambda n . \text{read } n m)) \right) ; \left(\text{fred}^3 (\lambda m . (\text{a}^4 (\text{diff}_{1,2} \text{poem})) (\lambda n . \text{read } n m)) \right)$$

$$\lambda c k . \exists z_1, \dots, z_{|\zeta|} . (\forall i \in \zeta . i_2 \in \text{poem}) \wedge (\forall i \in \zeta . \langle i_2, i_1 \rangle \in \text{read}) \wedge$$

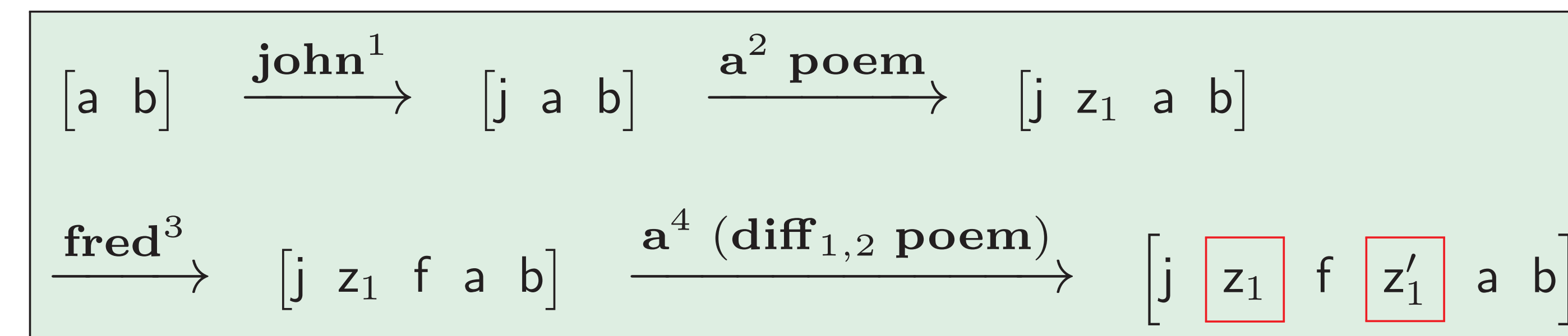
$$\exists z'_1, \dots, z'_{|v|} . (\forall i \in c' . i_4 \in \text{poem}) \wedge (c'_{1,2} \neq c'_{1,4}) \wedge ((\forall i \in c' . \langle i_4, i_3 \rangle \in \text{read}) \wedge k c')$$

$$\text{where } \zeta = [c_1^{j/1}, \dots, c_{|\zeta|}^{j/1}]$$

$$\text{where } \varsigma = [\zeta_1^{z_1/2}, \dots, \zeta_{|\zeta|}^{z_{|\zeta|}/2}]$$

$$\text{where } v = [\varsigma_1^{f/3}, \dots, \varsigma_{|v|}^{f/3}]$$

$$\text{where } c' = [v_1^{z'_1/4}, \dots, v_{|v|}^{z'_{|v|}/4}]$$



- (7) Every boy gave every girl a different poem

$$\left(\text{every}^1 \text{boy} \right) \left(\lambda m . (\text{every}^2 \text{girl} (\lambda n . (\text{a}^3 (\text{diff}_{\{2,3\}} \text{poem})) (\lambda l . \text{give } l n m))) \right)$$

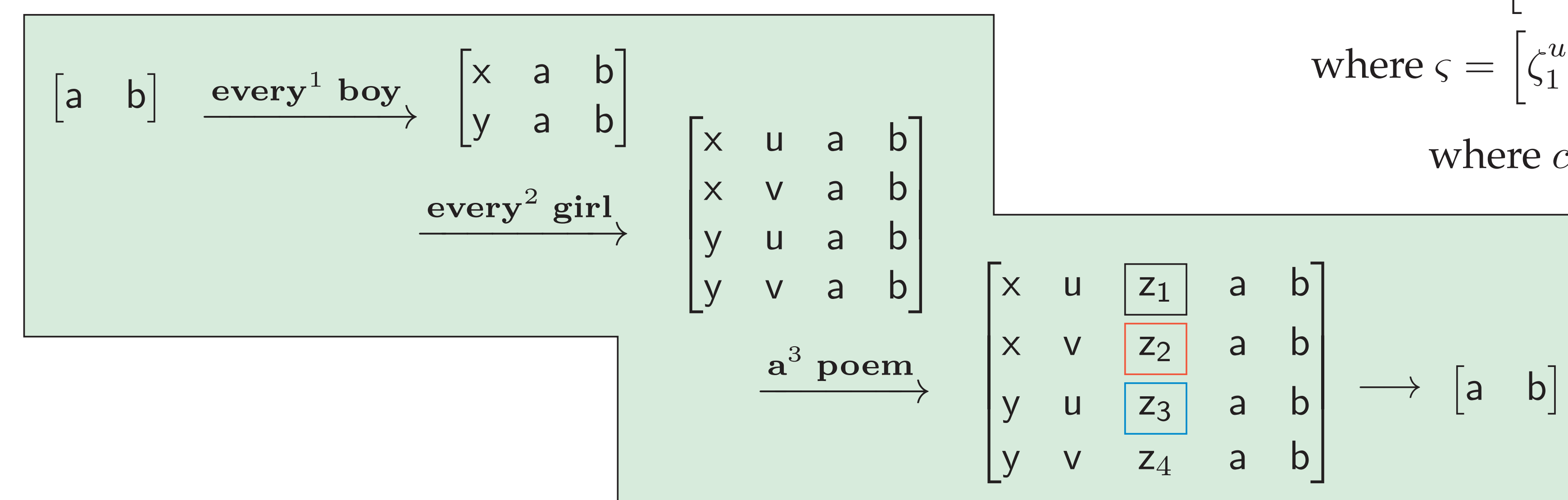
$$\lambda c k . (\forall x, y, x \neq y . (\forall i \in \zeta . i_1 \in \text{boy}) \rightarrow \forall u, v, u \neq v . (\forall i \in \varsigma . i_2 \in \text{girl}) \rightarrow$$

$$\exists z_1, \dots, z_{|\zeta|} . (\forall i \in c' . i_3 \in \text{poem}) \wedge \left\{ \begin{array}{l} c'_{2,3} \neq c'_{1,3} \\ c'_{3,3} \neq c'_{1,3} \end{array} \right\} \wedge (\forall i \in c' . \langle i_3, i_2, i_1 \rangle \in \text{give}) \wedge k c$$

$$\text{where } \zeta = [c_1^{x/1}, c_1^{y/1}, \dots, c_{|\zeta|}^{x/1}, c_{|\zeta|}^{y/1}]$$

$$\text{where } \varsigma = [\varsigma_1^{u/1}, \varsigma_1^{v/1}, \dots, \varsigma_{|\zeta|}^{u/1}, \varsigma_{|\zeta|}^{v/1}]$$

$$\text{where } c' = [\varsigma_1^{z_1/3}, \dots, \varsigma_{|\zeta|}^{z_{|\zeta|}/3}]$$



Adding Plurals

Plurals build sums, which can be split apart by a covert distributive operator (Δ_j), but neither process distributively duplications information

$$\text{the}^n \lambda PQck . (P n ; Q n) [c_1^{\oplus P/n}, \dots, c_{|c|}^{\oplus P/n}] k$$

$$\text{-s} \lambda P n c k . \forall x \ll \bigoplus_{i=1}^{|c|} (c_i)_n . P n c' T \wedge k c$$

, where $c' = [c_1^{x/n}, \dots, c_{|c|}^{x/n}]$

$$\Delta_j \lambda P n c k . \forall i \in c . \forall x \leq i_j . P n c' k$$

, where $c' = [c_1^{n \rightarrow x}, \dots, c_{|c|}^{n \rightarrow x}]$

Next: Unify Sg. and Pl. *Different*?

- Brasoveanu accounts for (8) by optionally allowing *different* to introduce its own distributivity

- (8) The boys read different poems

- This undercuts the idea that internal *different* exploits a special feature of distributive quantifiers

- **Yet, outside of singular/plural DPs, *different* and its relatives do not distinguish between universals, plurals, adverbials, etc.**

- (9) a. The boys (all) laugh differently

- b. {Each product, the products} differ(s) slightly
 c. {John and Bill, Every student} is/are different

- Alternative: let *different* always do its own distributing; try to account for the contrast between sg. and pl. *different* in a more general theory of the licensing of internal singular DPs

- (10) a. Every boy read a poem **internal**

- b. The boys read a poem **#internal**

References

Barker, C. and D. Bumford. To appear. Association with distributivity and the problem of multiple antecedents for singular *different*. *L&P*.
 Brasoveanu, A. 2011. Sentence-internal *different* as quantifier-internal anaphora. *L&P*, 34, 93–168.
 de Groote, P. 2006. Towards a Montagovian account of dynamics. In *Proceedings of SALT XVI*.