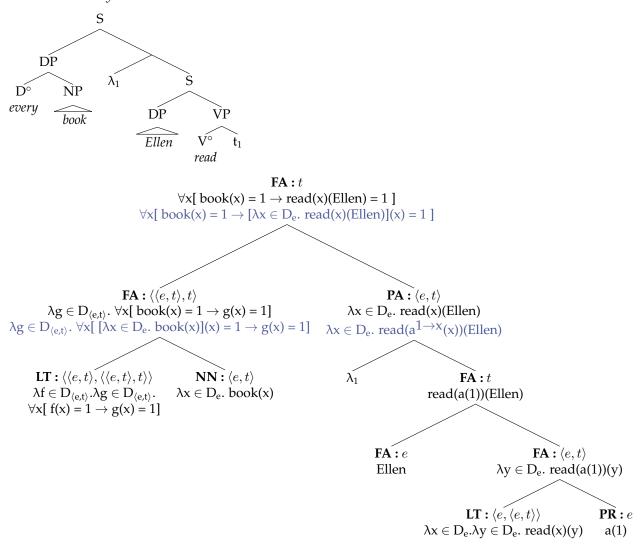
Course in Semantics · Ling 531 / 731 McKenzie · University of Kansas

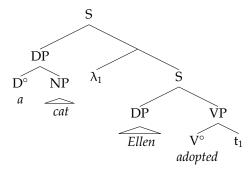
This workout has compositions with object quantifiers, and subject and object quantifiers. First, write out the truth-conditions semi-formally. Then, build each sentence based on the scope facts. Build the LF and the structure for each clause.

Assume assignment a.

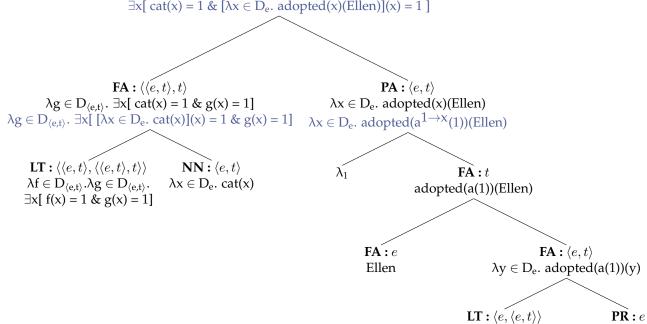
1. Ellen read every book.



2. Ellen adopted a cat.



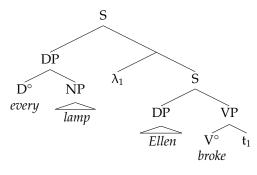
 $\begin{aligned} \mathbf{FA} : t \\ \exists \mathbf{x} [\ \mathsf{cat}(\mathbf{x}) = 1 \ \& \ \mathsf{adopted}(\mathbf{x})(\mathsf{Ellen}) = 1 \] \\ \exists \mathbf{x} [\ \mathsf{cat}(\mathbf{x}) = 1 \ \& \ [\lambda \mathbf{x} \in \mathsf{D_e}. \ \mathsf{adopted}(\mathbf{x})(\mathsf{Ellen})](\mathbf{x}) = 1 \] \end{aligned}$



 $\lambda x \in D_e. \lambda y \in D_e. \ adopted(x)(y)$

a(1)

3. Ellen broke each lamp.



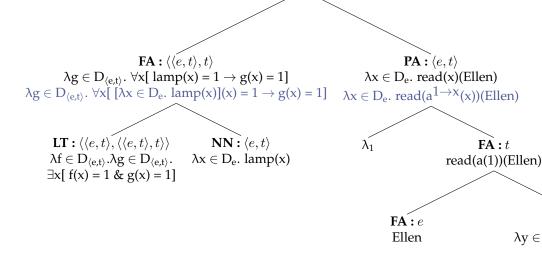
FA: t $\forall x [lamp(x) = 1 \rightarrow read(x)(Ellen) = 1]$ $\forall x [lamp(x) = 1 \rightarrow [\lambda x \in D_e. read(x)(Ellen)](x) = 1]$

FA: $\langle e, t \rangle$ $\lambda y \in D_e$. broke(a(1))(y)

 $\begin{aligned} & \textbf{LT:} & \langle e, \langle e, t \rangle \rangle \\ \lambda x \in D_e. \lambda y \in D_e. & \text{broke(x)(y)} \end{aligned}$

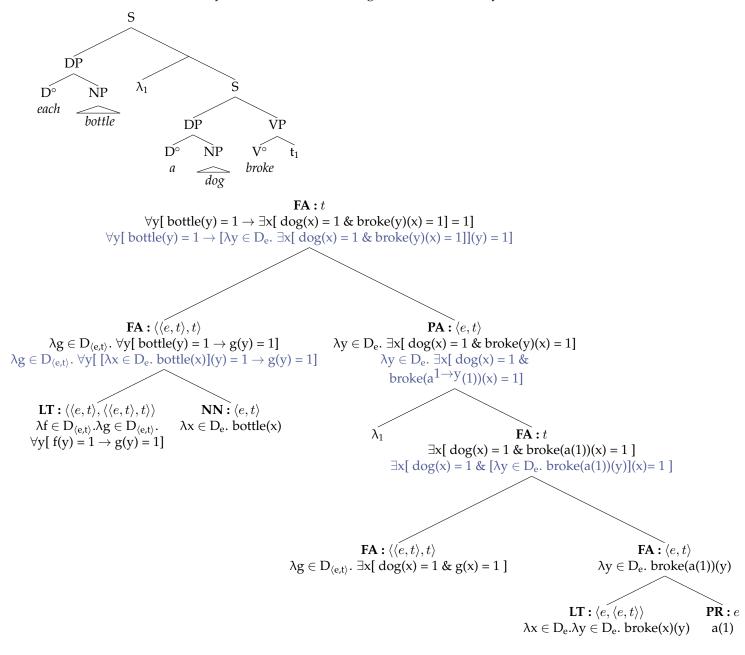
 $\overrightarrow{PR}:e$

a(1)



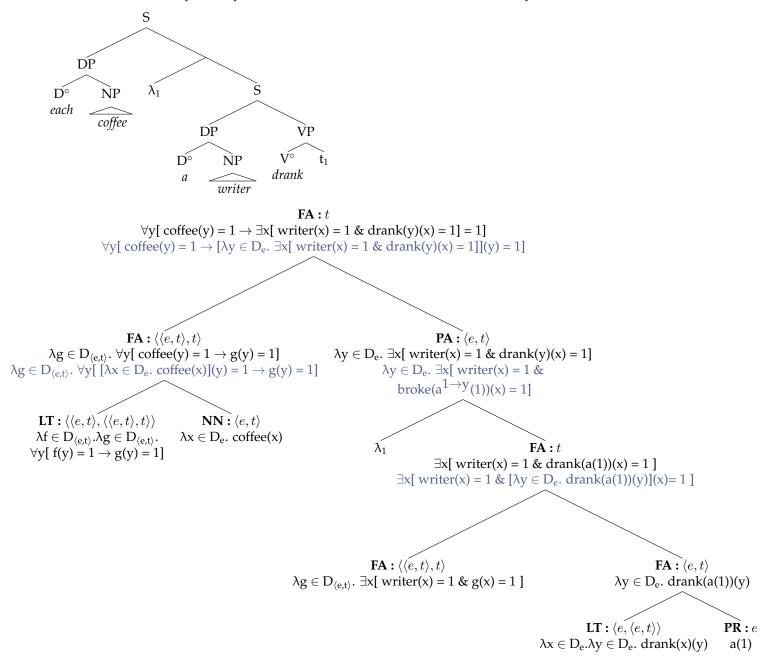
4. *A dog broke each bottle.* (inverse scope)

Truth-conditions: Each bottle y is such that there is a dog x such that x broke y

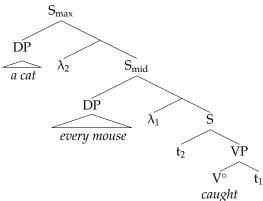


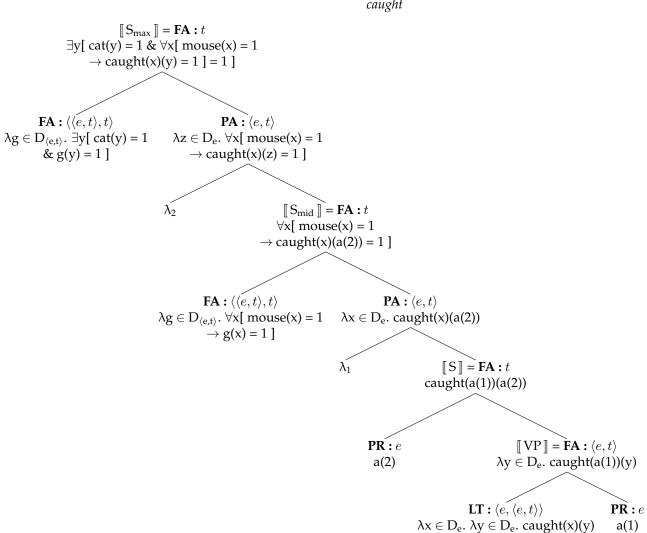
5. *A writer drank every coffee.* (inverse scope)

Truth-conditions: every coffee y is such that there is a writer x such that x drank y

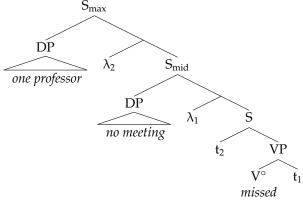


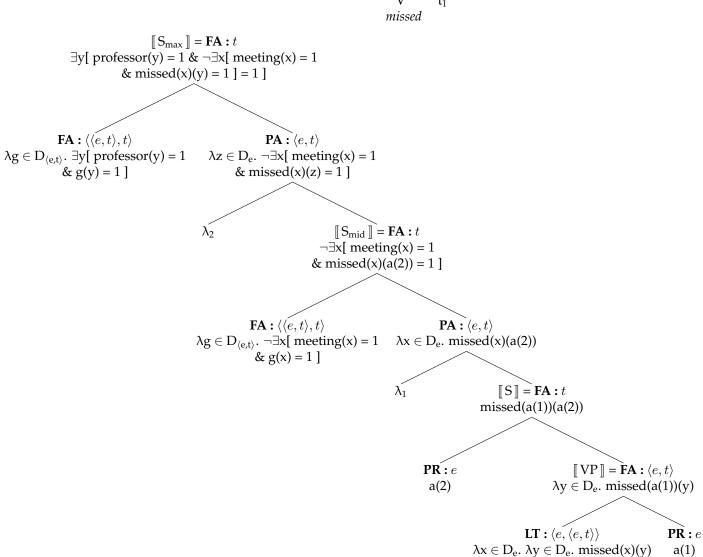
6. *A cat caught every mouse.* (surface scope)





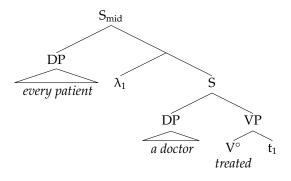
7. *One professor missed no meeting.* (surface scope; treat *one* like *a*)





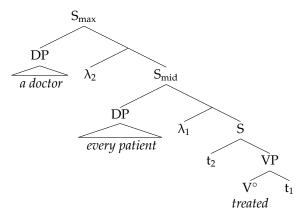
- **8.** A doctor treated every patient.
- 1. Write a context for inverse scope, or fill in the circles in a way that satisfies such a context... and draw its LF.

, Dr	A	В	\mathbf{C}	D
Jason	\bigcirc	\circ	\circ	\bigcirc
Peter	0	0	0	0
Maisie	0	0	0	0
Emilia	0	0	0	0



2. Write a context for surface scope, or fill in the circles in a way that satisfies such a context... and draw its LF.

Dr	A	В	C	D
Jason	\bigcirc	\circ	\circ	\bigcirc
Peter	\bigcirc	\circ	\circ	0
Maisie	0	0	0	0
Emilia	\bigcirc	\circ	\circ	0



3. Draw the composition for one of these LFs.