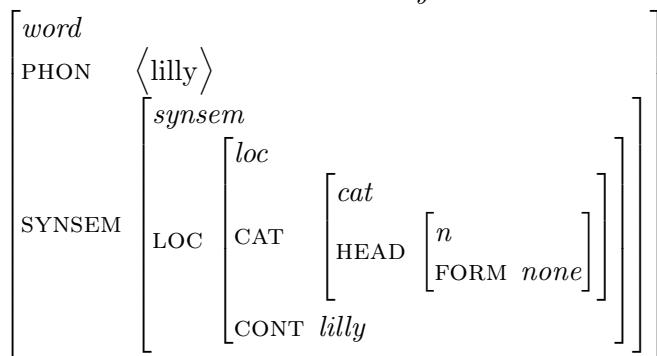# Raising and Control

Prof. Gert Webelhuth

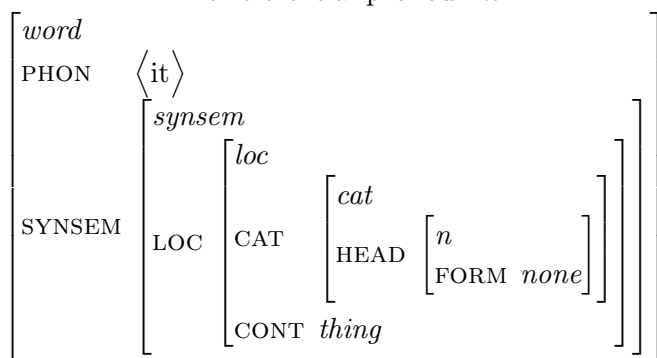## 1 Verbs and their subjects

(1) a. Lilly smiled.
  b. * It smiled.
  c. * There smiled.

(2) a. * Lilly rained.
  b. It rained.
  c. * There rained.

(3) a. * Lilly arrived a letter.
  b. * It arrived a letter.
  c. There arrived a letter.

2 Lexical entries of the nouns:

The word *Lilly*

$$
\begin{bmatrix}
word \\
\text{PHON} & \left\langle \text{lilly} \right\rangle \\
\text{SYNSEM} &
\begin{bmatrix}
synsem \\
\text{LOC} &
\begin{bmatrix}
loc \\
\text{CAT} &
\begin{bmatrix}
cat \\
\text{HEAD} &
\begin{bmatrix}
n \\
\text{FORM } none
\end{bmatrix}
\end{bmatrix} \\
\text{CONT } lilly
\end{bmatrix}
\end{bmatrix}
\end{bmatrix}
$$

The referential pronoun *it*

$$
\begin{bmatrix}
word \\
\text{PHON} & \left\langle \text{it} \right\rangle \\
\text{SYNSEM} &
\begin{bmatrix}
synsem \\
\text{LOC} &
\begin{bmatrix}
loc \\
\text{CAT} &
\begin{bmatrix}
cat \\
\text{HEAD} &
\begin{bmatrix}
n \\
\text{FORM } none
\end{bmatrix}
\end{bmatrix} \\
\text{CONT } thing
\end{bmatrix}
\end{bmatrix}
\end{bmatrix}
$$

The expletive pronoun *it*

$$
\begin{bmatrix}
word \\
\text{PHON} & \left\langle \text{it} \right\rangle \\
\text{SYNSEM} &
\begin{bmatrix}
synsem \\
\text{LOC} &
\begin{bmatrix}
loc \\
\text{CAT} &
\begin{bmatrix}
cat \\
\text{HEAD} &
\begin{bmatrix}
n \\
\text{FORM } it
\end{bmatrix}
\end{bmatrix} \\
\text{CONT } none
\end{bmatrix}
\end{bmatrix}
\end{bmatrix}
$$
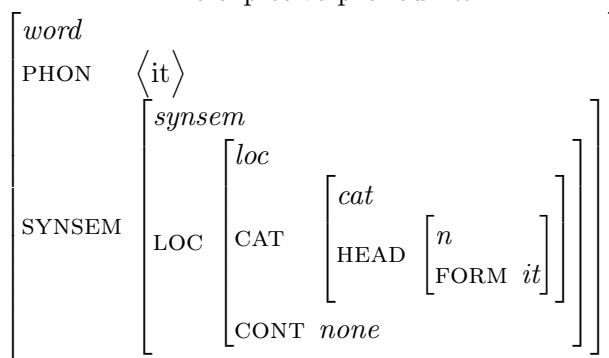
The expletive pronoun *there*

$$
\begin{bmatrix}
word \\
\text{PHON} \quad \left\langle \text{there} \right\rangle \\
\text{SYNSEM} \begin{bmatrix}
synsem \\
\text{LOC} \begin{bmatrix}
loc \\
\text{CAT} \begin{bmatrix}
cat \\
\text{HEAD} \begin{bmatrix} n \\ \text{FORM} \ there \end{bmatrix}
\end{bmatrix} \\
\text{CONT} \ none
\end{bmatrix}
\end{bmatrix}
\end{bmatrix}
$$

3   Lexical entries of the verbs

The verb *smiles*

$$
\begin{bmatrix}
word \\
\text{PHON} \quad \left\langle \text{smiles} \right\rangle \\
\text{SYNSEM} \begin{bmatrix}
synsem \\
\text{LOC} \begin{bmatrix}
loc \\
\text{CAT} \begin{bmatrix}
cat \\
\text{HEAD} \begin{bmatrix} v \\ \text{FORM} \ fin \end{bmatrix} \\
\text{SUBJ} \left\langle \begin{bmatrix} \text{LOC} \begin{bmatrix} loc \\ \text{CAT|HEAD} \begin{bmatrix} n \\ \text{FORM} \ none \end{bmatrix} \\ \text{CONT} \quad \boxed{1} \end{bmatrix} \end{bmatrix} \right\rangle \\
\text{SPR} \quad \left\langle \right\rangle \\
\text{COMPS} \left\langle \right\rangle
\end{bmatrix} \\
\text{CONT} \begin{bmatrix} smile\text{-}rel \\ \text{ARG1} \ \boxed{1} \end{bmatrix}
\end{bmatrix}
\end{bmatrix}
\end{bmatrix}
$$

The verb *rains*

$$
\begin{bmatrix}
word \\
\text{PHON} \quad \left\langle \text{rains} \right\rangle \\
\text{SYNSEM} \begin{bmatrix}
synsem \\
\text{LOC} \begin{bmatrix}
loc \\
\text{CAT} \begin{bmatrix}
cat \\
\text{HEAD} \begin{bmatrix} v \\ \text{FORM} \ fin \end{bmatrix} \\
\text{SUBJ} \left\langle \begin{bmatrix} \text{LOC} \begin{bmatrix} loc \\ \text{CAT|HEAD} \begin{bmatrix} n \\ \text{FORM} \ it \end{bmatrix} \\ \text{CONT} \quad none \end{bmatrix} \end{bmatrix} \right\rangle \\
\text{SPR} \quad \left\langle \right\rangle \\
\text{COMPS} \left\langle \right\rangle
\end{bmatrix} \\
\text{CONT} \ rain\text{-}rel
\end{bmatrix}
\end{bmatrix}
\end{bmatrix}
$$

The verb *arrives*

$$
\begin{bmatrix}
word \\
\text{PHON} \quad \langle\text{arrives}\rangle \\
\text{SYNSEM} \quad
\begin{bmatrix}
synsem \\
\text{LOC}
\begin{bmatrix}
loc \\
\text{CAT}
\begin{bmatrix}
cat \\
\text{HEAD} \begin{bmatrix} v \\ \text{FORM } fin \end{bmatrix} \\
\text{SUBJ} \left\langle \begin{bmatrix} \text{LOC} \begin{bmatrix} loc \\ \text{CAT}|\text{HEAD} \begin{bmatrix} n \\ \text{FORM } there \end{bmatrix} \\ \text{CONT} \quad none \end{bmatrix} \end{bmatrix} \right\rangle \\
\text{SPR} \quad \langle\,\rangle \\
\text{COMPS} \left\langle \begin{bmatrix} \text{LOC} \begin{bmatrix} loc \\ \text{CAT}|\text{HEAD} \begin{bmatrix} n \\ \text{FORM } none \end{bmatrix} \\ \text{CONT} \quad \boxed{1} \end{bmatrix} \end{bmatrix} \right\rangle
\end{bmatrix} \\
\text{CONT} \begin{bmatrix} arrive\text{-}rel \\ \text{ARG1 } \boxed{1} \end{bmatrix}
\end{bmatrix}
\end{bmatrix}
\end{bmatrix}
$$

4   The difference between *seem* and *try*

4.1   seem

$\left\{ \begin{array}{c} \text{Lilly} \\ \text{It} \\ \text{There} \end{array} \right\}$ seemed to smile

$\left\{ \begin{array}{c} \text{Lilly} \\ \text{It} \\ \text{There} \end{array} \right\}$ seemed to rain

$\left\{ \begin{array}{c} \text{Lilly} \\ \text{It} \\ \text{There} \end{array} \right\}$ seemed to arrive a letter
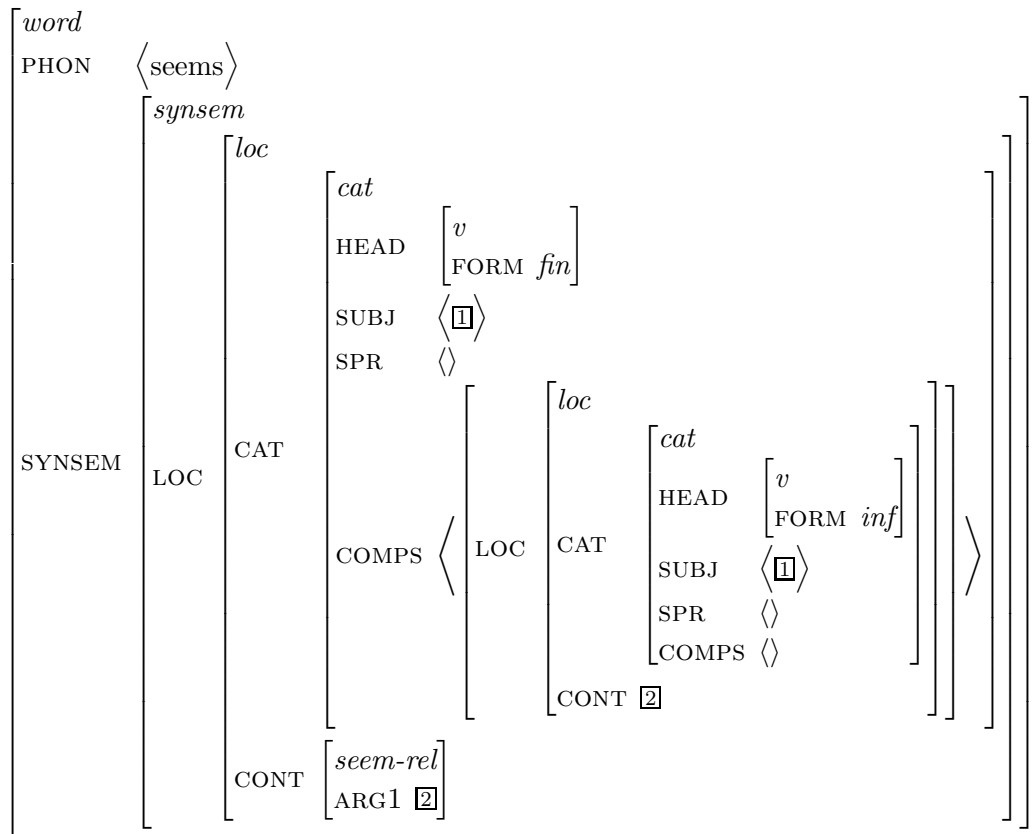
4.2   try

$\left\{ \begin{array}{c} \text{Lilly} \\ \text{It} \\ \text{There} \end{array} \right\}$ tried to smile

$\left\{ \begin{array}{c} \text{Lilly} \\ \text{It} \\ \text{There} \end{array} \right\}$ tried to rain

$\left\{ \begin{array}{c} \text{Lilly} \\ \text{It} \\ \text{There} \end{array} \right\}$ tried to arrive a letter

5 The lexical entries of *seem* and *try*

The raising verb *seems*

$$
\begin{bmatrix}
word \\
\text{PHON} \quad \langle \text{seems} \rangle \\
\text{SYNSEM} \begin{bmatrix}
synsem \\
\text{LOC} \begin{bmatrix}
loc \\
\text{CAT} \begin{bmatrix}
cat \\
\text{HEAD} \begin{bmatrix} v \\ \text{FORM } \textit{fin} \end{bmatrix} \\
\text{SUBJ} \quad \langle \boxed{1} \rangle \\
\text{SPR} \quad \langle \rangle \\
\text{COMPS} \left\langle \begin{bmatrix}
\text{LOC} \begin{bmatrix}
loc \\
\text{CAT} \begin{bmatrix}
cat \\
\text{HEAD} \begin{bmatrix} v \\ \text{FORM } \textit{inf} \end{bmatrix} \\
\text{SUBJ} \quad \langle \boxed{1} \rangle \\
\text{SPR} \quad \langle \rangle \\
\text{COMPS} \langle \rangle
\end{bmatrix} \\
\text{CONT} \boxed{2}
\end{bmatrix}
\end{bmatrix} \right\rangle
\end{bmatrix} \\
\text{CONT} \begin{bmatrix} seem\text{-}rel \\ \text{ARG1} \boxed{2} \end{bmatrix}
\end{bmatrix}
\end{bmatrix}
\end{bmatrix}
$$

The control verb *tries*

$$
\begin{bmatrix}
\textit{word} \\
\text{PHON} \quad \left\langle \text{tries} \right\rangle \\
\text{SYNSEM} \quad
\begin{bmatrix}
\textit{synsem} \\
\text{LOC} \quad
\begin{bmatrix}
\textit{loc} \\
\text{CAT} \quad
\begin{bmatrix}
\textit{cat} \\
\text{HEAD} \quad
\begin{bmatrix}
v \\
\text{FORM } \textit{fin}
\end{bmatrix} \\
\text{SUBJ} \quad
\left\langle
\begin{bmatrix}
\textit{synsem} \\
\text{LOC}|\text{CONT } \boxed{1}
\end{bmatrix}
\right\rangle \\
\text{SPR} \quad \left\langle \right\rangle \\
\text{COMPS} \quad
\left\langle
\begin{bmatrix}
\text{LOC} \quad
\begin{bmatrix}
\textit{loc} \\
\text{CAT} \quad
\begin{bmatrix}
\textit{cat} \\
\text{HEAD} \quad
\begin{bmatrix}
v \\
\text{FORM } \textit{inf}
\end{bmatrix} \\
\text{SUBJ} \quad
\left\langle
\begin{bmatrix}
\textit{synsem} \\
\text{LOC}|\text{CONT } \boxed{1}
\end{bmatrix}
\right\rangle \\
\text{SPR} \quad \left\langle \right\rangle \\
\text{COMPS} \quad \left\langle \right\rangle
\end{bmatrix} \\
\text{CONT} \quad \boxed{2}
\end{bmatrix}
\end{bmatrix}
\right\rangle
\end{bmatrix} \\
\text{CONT} \quad
\begin{bmatrix}
\textit{seem-rel} \\
\text{ARG1 } \boxed{1} \\
\text{ARG2 } \boxed{2}
\end{bmatrix}
\end{bmatrix}
\end{bmatrix}
\end{bmatrix}
$$