

Ejemplo de matriz de atribución de valores para “corre”

$$\left[ \begin{array}{c} \textit{word} \\ \text{SYN} \left[ \begin{array}{c} \text{HEAD} \left[ \begin{array}{c} \textit{verb} \\ \text{AGREE} \left[ \begin{array}{c} \text{NUM sg} \\ \text{PER 3} \end{array} \right] \end{array} \right] \\ \text{SUBCAT} \langle \text{NP } \oplus \rangle \end{array} \right] \end{array} \right]$$

|  
corre

**Combinando SV con V**

$$\left[ \begin{array}{c} \textit{phrase} \\ \text{SYN} \left[ \begin{array}{c} \text{HEAD } \boxed{5} \\ \text{SUBCAT} \langle \boxed{4} \oplus \rangle \end{array} \right] \end{array} \right] \rightarrow \left[ \begin{array}{c} \textit{word} \\ \text{SYN} \left[ \begin{array}{c} \text{HEAD } \boxed{5} [\textit{verb}] \\ \text{SUBCAT} \langle \boxed{4} \oplus \rangle \end{array} \right] \end{array} \right]$$

**Ejemplo de SV**

$$\left[ \begin{array}{c} \textit{phrase} \\ \text{SYN} \left[ \begin{array}{c} \text{HEAD } \boxed{5} \\ \text{SUBCAT} \langle \boxed{6} \oplus \rangle \end{array} \right] \end{array} \right]$$

|

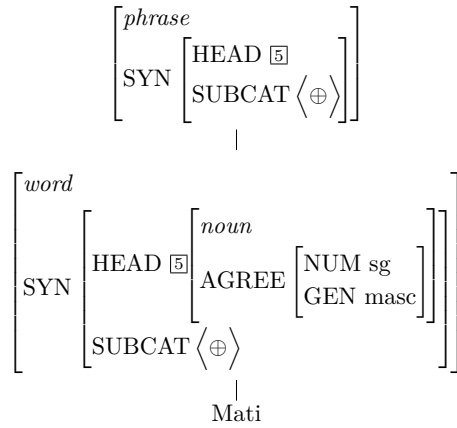
$$\left[ \begin{array}{c} \textit{word} \\ \text{SYN} \left[ \begin{array}{c} \text{HEAD } \boxed{5} \left[ \begin{array}{c} \textit{verb} \\ \text{AGREE} \left[ \begin{array}{c} \text{NUM sg} \\ \text{PER 3} \end{array} \right] \end{array} \right] \\ \text{SUBCAT} \langle \text{NP } \boxed{6} \oplus \rangle \end{array} \right] \end{array} \right]$$

|  
corre

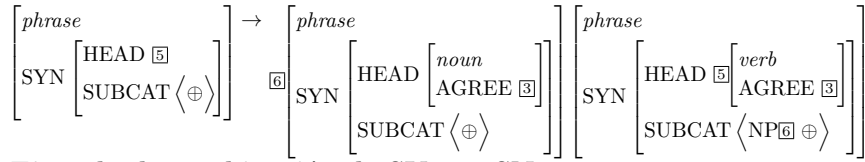
**Combinando SN con N**

$$\left[ \begin{array}{c} \textit{phrase} \\ \text{SYN} \left[ \begin{array}{c} \text{HEAD } \boxed{5} \\ \text{SUBCAT} \langle \oplus \rangle \end{array} \right] \end{array} \right] \rightarrow \left[ \begin{array}{c} \textit{word} \\ \text{SYN} \left[ \begin{array}{c} \text{HEAD } \boxed{5} [\textit{noun}] \\ \text{SUBCAT} \langle \oplus \rangle \end{array} \right] \end{array} \right]$$

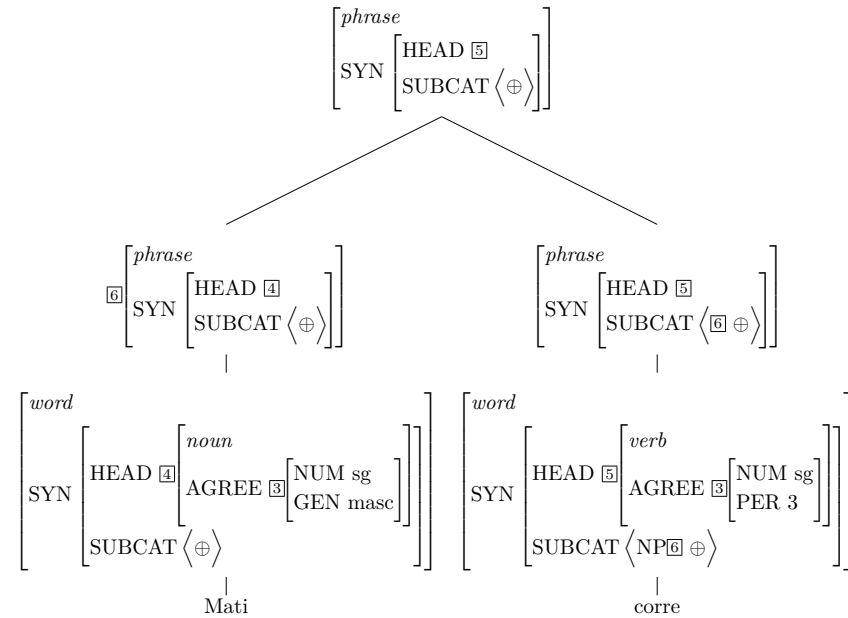
**Ejemplo de SN**



**Combinando SV con SN**



**Ejemplo de combinación de SV con SN**



**Construyendo una cláusula transitiva (inicio)**

$$\begin{array}{c}
\left[ \begin{array}{c} \textit{word} \\ \text{SYN} \left[ \begin{array}{c} \text{HEAD} \left[ \begin{array}{c} \textit{noun} \\ \text{AGREE} \left[ \begin{array}{c} \text{NUM sg} \\ \text{GEN masc} \end{array} \right] \end{array} \right] \\ \text{SUBCAT} \langle \text{D} \oplus \rangle \end{array} \right] \end{array} \right] \left[ \begin{array}{c} \textit{word} \\ \text{SYN} \left[ \begin{array}{c} \text{HEAD} \left[ \begin{array}{c} \textit{det} \\ \text{AGREE} \left[ \begin{array}{c} \text{NUM sg} \\ \text{GEN masc} \end{array} \right] \end{array} \right] \\ \text{SUBCAT} \langle \oplus \rangle \end{array} \right] \end{array} \right] \\
\downarrow \text{alfajor} \qquad \qquad \downarrow \text{el} \\
\left[ \begin{array}{c} \textit{phrase} \\ \text{SYN} \left[ \begin{array}{c} \text{HEAD} \boxed{5} \\ \text{SUBCAT} \langle \oplus \rangle \end{array} \right] \end{array} \right] \rightarrow \left[ \begin{array}{c} \textit{word} \\ \text{SYN} \left[ \begin{array}{c} \text{HEAD} \left[ \begin{array}{c} \textit{det} \\ \text{AGREE} \boxed{3} \end{array} \right] \end{array} \right] \end{array} \right] \left[ \begin{array}{c} \textit{word} \\ \text{SYN} \left[ \begin{array}{c} \text{HEAD} \boxed{5} \left[ \begin{array}{c} \textit{noun} \\ \text{AGREE} \boxed{3} \end{array} \right] \\ \text{SUBCAT} \langle \boxed{4} \oplus \rangle \end{array} \right] \end{array} \right]
\end{array}$$

$$\left[ \begin{array}{c} \textit{phrase} \\ \text{SYN} \left[ \begin{array}{c} \text{HEAD} \boxed{5} \\ \text{SUBCAT} \langle \oplus \rangle \end{array} \right] \end{array} \right]$$

$$\begin{array}{c}
\boxed{4} \left[ \begin{array}{c} \textit{word} \\ \text{SYN} \left[ \begin{array}{c} \text{HEAD} \left[ \begin{array}{c} \textit{det} \\ \text{AGREE} \boxed{3} \left[ \begin{array}{c} \text{NUM sg} \\ \text{GEN masc} \end{array} \right] \end{array} \right] \\ \text{SUBCAT} \langle \oplus \rangle \end{array} \right] \end{array} \right] \left[ \begin{array}{c} \textit{word} \\ \text{SYN} \left[ \begin{array}{c} \text{HEAD} \boxed{5} \left[ \begin{array}{c} \textit{noun} \\ \text{AGREE} \boxed{3} \left[ \begin{array}{c} \text{NUM sg} \\ \text{GEN masc} \end{array} \right] \end{array} \right] \\ \text{SUBCAT} \langle \text{D} \boxed{4} \oplus \rangle \end{array} \right] \end{array} \right] \\
\downarrow \text{el} \qquad \qquad \downarrow \text{alfajor}
\end{array}$$

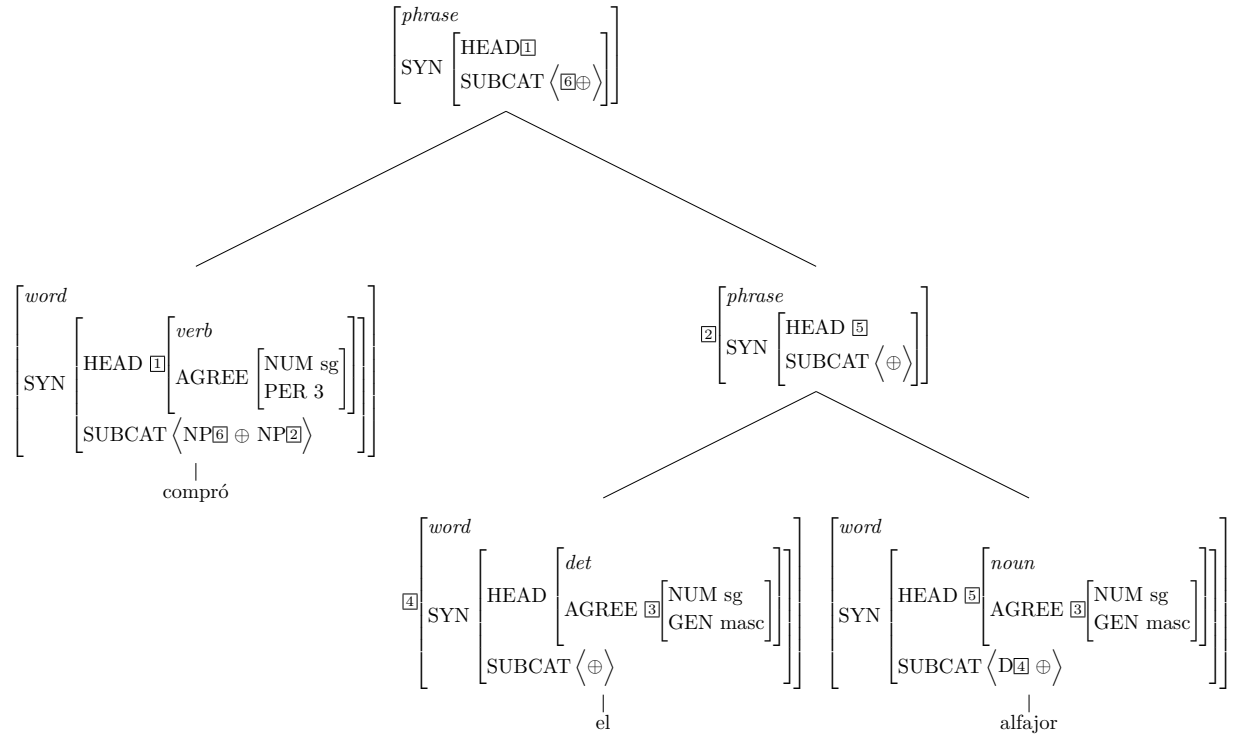
$$\left[ \begin{array}{c} \textit{word} \\ \text{SYN} \left[ \begin{array}{c} \text{HEAD} \left[ \begin{array}{c} \textit{verb} \\ \text{AGREE} \left[ \begin{array}{c} \text{NUM sg} \\ \text{PER 3} \end{array} \right] \end{array} \right] \\ \text{SUBCAT} \langle \text{NP} \oplus \text{NP} \rangle \end{array} \right] \end{array} \right]$$

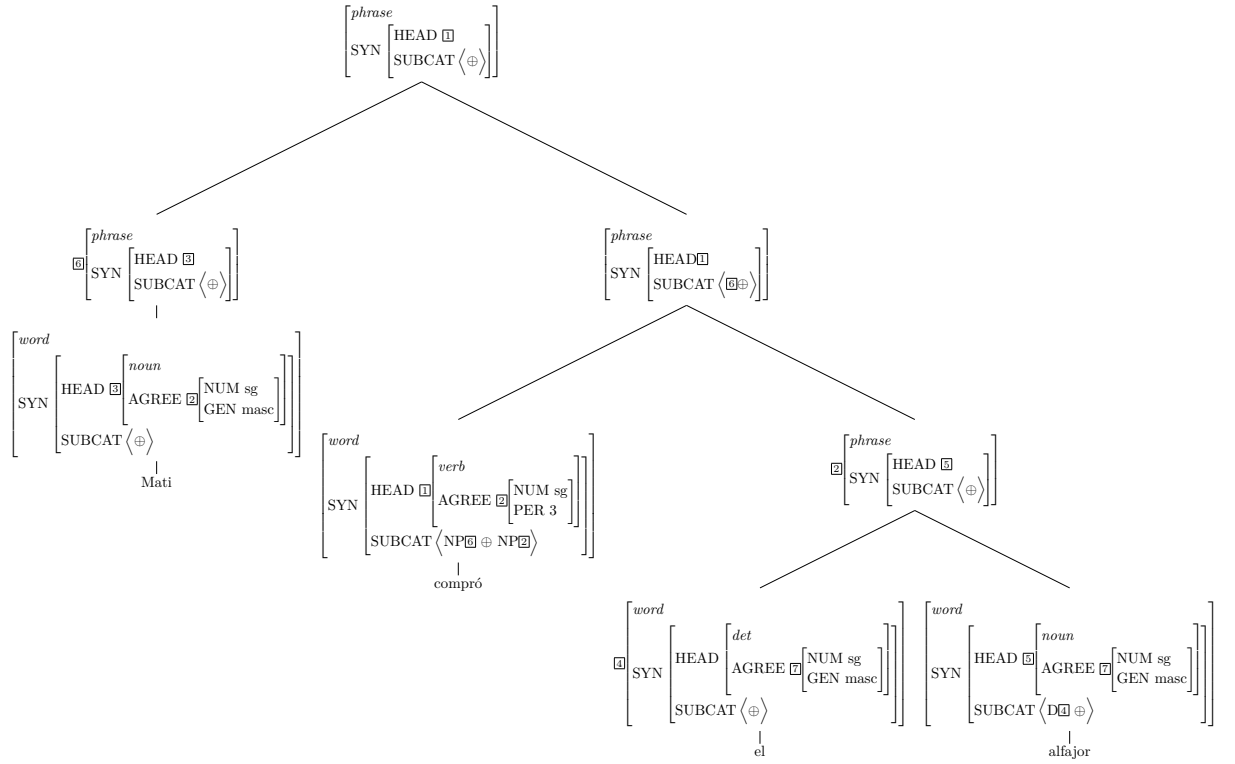
compró

**Regla de reescritura para el SV**

$$\left[ \begin{array}{c} \textit{phrase} \\ \text{SYN} \left[ \begin{array}{c} \text{HEAD} \boxed{1} \\ \text{SUBCAT} \langle \boxed{4} \oplus \rangle \end{array} \right] \end{array} \right] \rightarrow \left[ \begin{array}{c} \textit{word} \\ \text{SYN} \left[ \begin{array}{c} \text{HEAD} \boxed{1} \left[ \textit{verb} \right] \\ \text{SUBCAT} \langle \text{NP} \boxed{4} \oplus \text{NP} \boxed{6} \rangle \end{array} \right] \end{array} \right] \boxed{6} \left[ \begin{array}{c} \text{SYN} \left[ \text{HEAD} \textit{noun} \right] \end{array} \right]$$

**Construyendo una cláusula transitiva (continuación)**





### Esquemas de estructura de frase (adaptados)

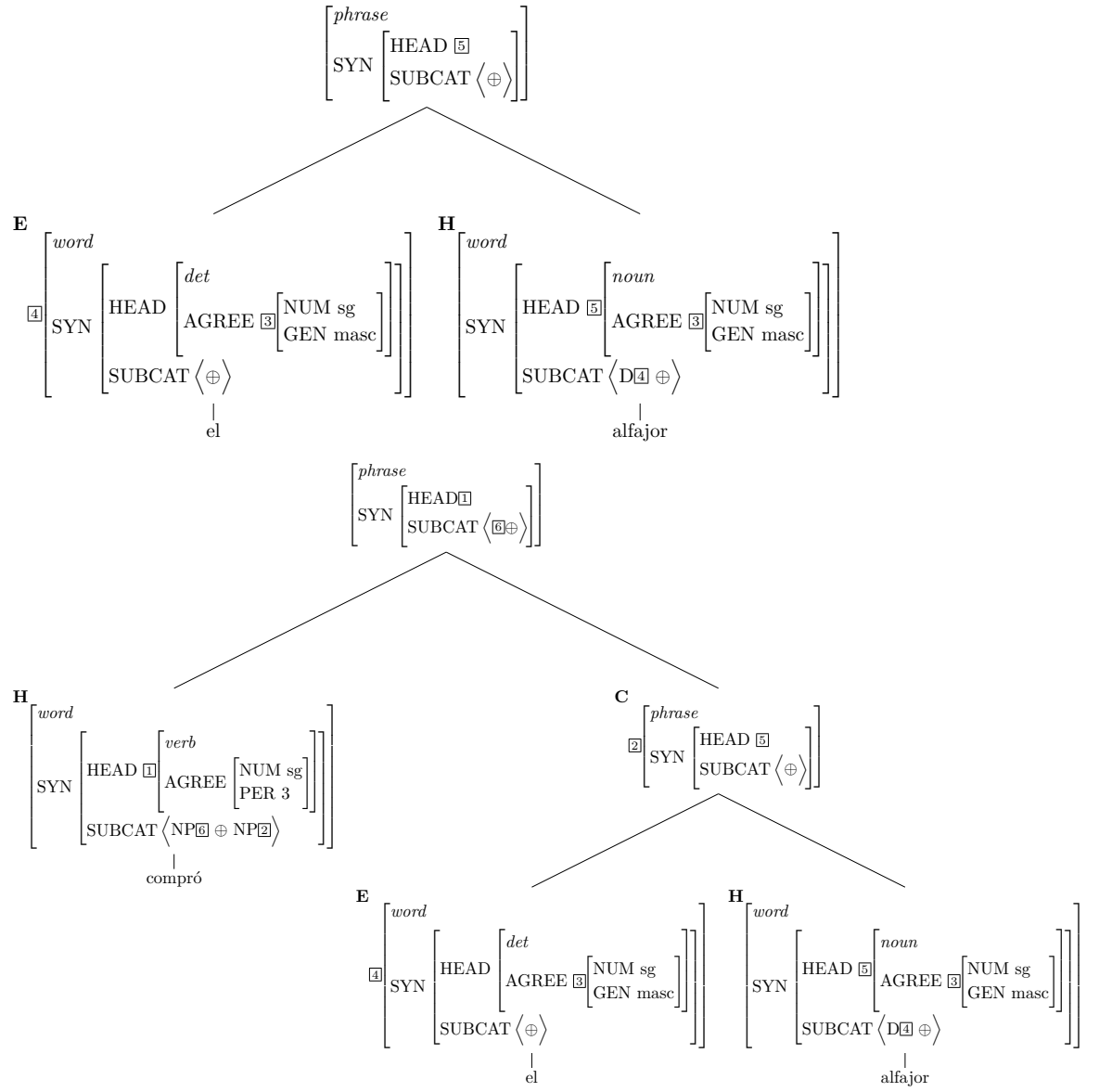
#### Regla para especificadores:

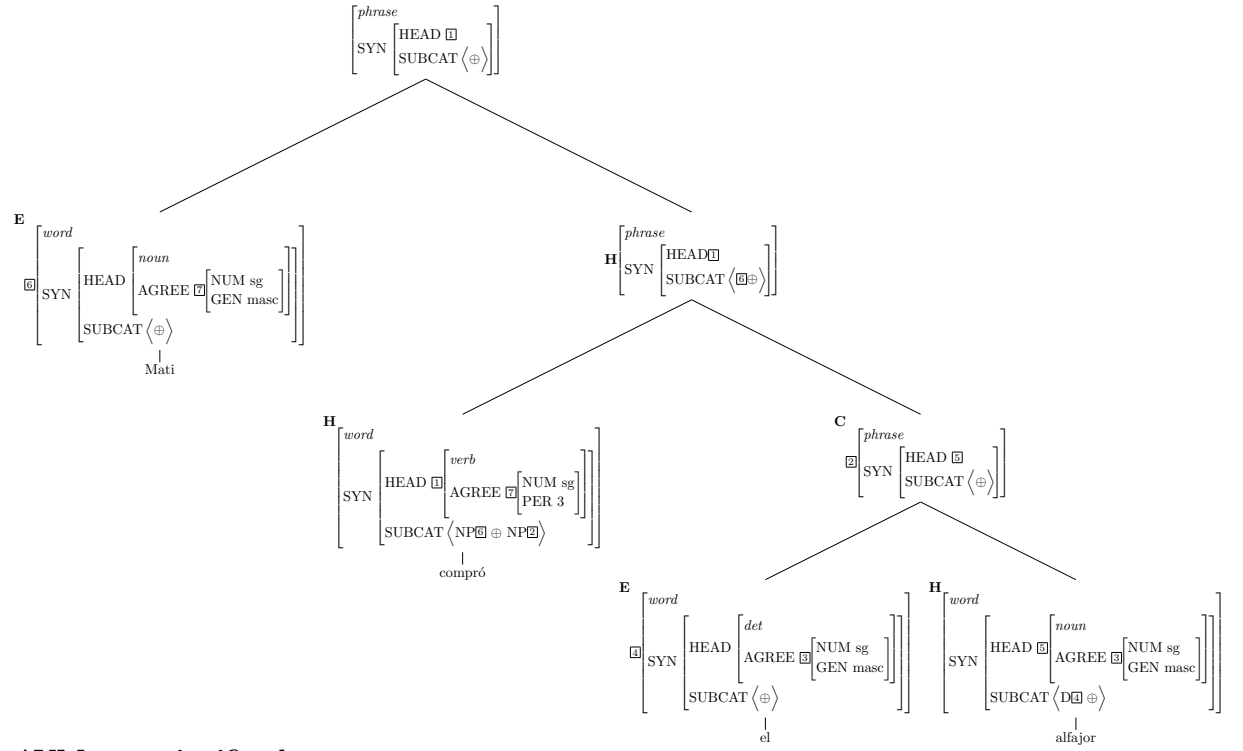
$$\left[ \begin{array}{c} \text{phrase} \\ \text{SYN} \left[ \begin{array}{c} \text{HEAD } 1 \\ \text{SUBCAT } \langle \oplus \rangle \end{array} \right] \end{array} \right] \rightarrow \left[ 4 \right] \text{SYN} \left[ \begin{array}{c} \text{HEAD } \left[ \text{AGREE } 3 \right] \end{array} \right] \mathbf{H} \left[ \begin{array}{c} \text{SYN} \left[ \begin{array}{c} \text{HEAD } 1 \left[ \text{AGREE } 3 \right] \end{array} \right] \\ \text{SUBCAT } \langle 4 \oplus \rangle \end{array} \right]$$

#### Regla para complementos:

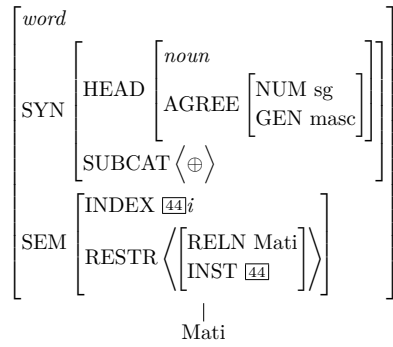
$$\left[ \begin{array}{c} \text{phrase} \\ \text{SYN} \left[ \begin{array}{c} \text{HEAD } 1 \\ \text{AGREE } 3 \\ \text{SUBCAT } \langle 4 \oplus \rangle \end{array} \right] \end{array} \right] \rightarrow \mathbf{H} \left[ \begin{array}{c} \text{word} \\ \text{SYN} \left[ \begin{array}{c} \text{HEAD } 1 \\ \text{AGREE } 3 \\ \text{SUBCAT } \langle 4 \oplus 6 \dots 6+n \rangle \end{array} \right] \end{array} \right] \left[ 6 \dots 6+n \right]$$

Combinando una estructura transitiva con los esquemas de estructura de frase (adaptados)





### AVMs con significado

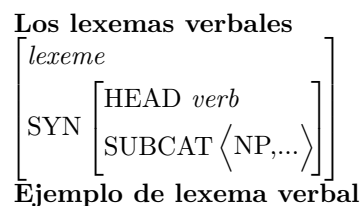




$$\begin{array}{c}
\left[ \begin{array}{c} \textit{word} \\ \text{SYN} \left[ \begin{array}{c} \text{HEAD} \left[ \begin{array}{c} \textit{verb} \\ \text{AGREE} \left[ \begin{array}{c} \text{NUM sg} \\ \text{PER 3} \end{array} \right] \end{array} \right] \\ \text{SUBCAT} \left\langle \left[ \begin{array}{c} \boxed{22} \text{NP} \left[ \text{SEM} \left[ \text{INDEX } \boxed{46} \right] \right] \oplus \boxed{23} \text{NP} \left[ \text{SEM} \left[ \text{INDEX } \boxed{47} \right] \right] \end{array} \right] \right\rangle \\ \text{SEM} \left[ \begin{array}{c} \text{INDEX } \boxed{45} s \\ \text{RESTR} \left\langle \begin{array}{c} \text{RELN comprar} \\ \text{SIT } \boxed{45} \\ \text{COMPRADOR } \boxed{46} i \\ \text{COMPRADO } \boxed{47} j \end{array} \right\rangle \end{array} \right] \end{array} \right] \\
| \\
\text{compró}
\end{array}$$

$$\begin{array}{c}
\left[ \begin{array}{c} \textit{phrase} \\ \text{SYN} \left[ \begin{array}{c} \text{HEAD } \boxed{1} \\ \text{SUBCAT} \left\langle \boxed{22} \oplus \right\rangle \end{array} \right] \\ \text{SEM} \left[ \begin{array}{c} \text{INDEX } \boxed{43} s \\ \text{RESTR} \left\langle \boxed{49}, \boxed{50} \right\rangle \end{array} \right] \end{array} \right]
\end{array}$$

$$\begin{array}{c}
\mathbf{H} \quad \left[ \begin{array}{c} \textit{word} \\ \text{SYN} \left[ \begin{array}{c} \text{HEAD } \boxed{1} \textit{verb} \\ \text{AGREE} \left[ \begin{array}{c} \text{NUM sg} \\ \text{PER 3} \end{array} \right] \\ \text{SUBCAT} \left\langle \left[ \begin{array}{c} \boxed{22} \text{NP} \left[ \text{SEM} \left[ \text{INDEX } \boxed{46} \right] \right] \oplus \boxed{23} \text{NP} \left[ \text{SEM} \left[ \text{INDEX } \boxed{47} \right] \right] \end{array} \right] \right\rangle \\ \text{SEM} \left[ \begin{array}{c} \text{INDEX } \boxed{45} s \\ \text{RESTR } \boxed{49} \left\langle \begin{array}{c} \text{RELN comprar} \\ \text{SIT } \boxed{45} \\ \text{COMPRADOR } \boxed{46} i \\ \text{COMPRADO } \boxed{47} j \end{array} \right\rangle \end{array} \right] \end{array} \right] \\
| \\
\text{compró}
\end{array}
\quad
\mathbf{C} \quad \left[ \begin{array}{c} \textit{phrase} \\ \text{SYN} \left[ \begin{array}{c} \text{HEAD } \boxed{5} \\ \text{SUBCAT} \left\langle \oplus \right\rangle \end{array} \right] \\ \boxed{23} \text{SEM} \left[ \begin{array}{c} \text{INDEX } \boxed{47} j \\ \text{RESTR } \boxed{50} \left\langle \begin{array}{c} \text{RELN el alfajor relevante} \\ \text{INST } \boxed{47} \end{array} \right\rangle \end{array} \right] \end{array} \right] \\
| \\
\text{el alfajor}
\end{array}$$



10

## Reglas léxicas

Un molde general para las reglas léxicas flexivas:

$$\left[ \begin{array}{l} \textit{i-rule} \\ \text{INPUT} \left\langle X, \left[ \begin{array}{l} \textit{lexeme} \\ \text{SYN } \boxed{3} \\ \text{SEM } \boxed{5} \end{array} \right] \right\rangle \\ \text{OUTPUT} \left\langle Y, \left[ \begin{array}{l} \textit{word} \\ \text{SYN } \boxed{3} \\ \text{SEM } \boxed{5} \end{array} \right] \right\rangle \end{array} \right]$$

Regla léxica flexiva para verbos en 3 persona singular

$$\left[ \begin{array}{l} \textit{i-rule} \\ \text{INPUT} \left\langle \boxed{1}, \left[ \begin{array}{l} \textit{lexeme} \\ \text{SYN } \boxed{3} \left[ \begin{array}{l} \text{HEAD } \textit{verb} \\ \text{SUBCAT } \boxed{4} \end{array} \right] \\ \text{SEM } \boxed{5} \end{array} \right] \right\rangle \\ \text{OUTPUT} \left\langle F_{3sg} \langle \boxed{1} \rangle, \left[ \begin{array}{l} \textit{word} \\ \text{SYN } \boxed{3} \left[ \begin{array}{l} \text{HEAD } \left[ \begin{array}{l} \textit{verb} \\ \text{AGREE } \left[ \begin{array}{l} \text{PER } 3 \\ \text{NUM } \textit{sg} \end{array} \right] \end{array} \right] \\ \text{SUBCAT } \boxed{4} \end{array} \right] \\ \text{SEM } \boxed{5} \end{array} \right] \right\rangle \end{array} \right]$$

Ejemplo de regla léxica flexiva

$$\left[ \begin{array}{l} \textit{i-rule} \\ \text{INPUT} \left\langle \boxed{1} \text{ compr-}, \left[ \begin{array}{l} \textit{lexeme} \\ \text{SYN } \boxed{3} \left[ \begin{array}{l} \text{HEAD } \left[ \textit{verb} \right] \\ \text{SUBCAT } \boxed{4} \left\langle \text{NP} \left[ \text{SEM} \left[ \text{INDEX } \boxed{46} \right] \right] \oplus \text{NP} \left[ \text{SEM} \left[ \text{INDEX } \boxed{47} \right] \right] \right\rangle \right] \\ \text{INDEX } \boxed{45} \textit{s} \\ \text{SEM } \boxed{5} \left[ \begin{array}{l} \text{RESTR} \left\langle \left[ \begin{array}{l} \text{RELN } \textit{comprar} \\ \text{SIT } \boxed{45} \\ \text{COMPRADOR } \boxed{46} \textit{i} \\ \text{COMPRADO } \boxed{47} \textit{j} \end{array} \right] \right\rangle \end{array} \right] \end{array} \right] \right\rangle \\ \text{OUTPUT} \left\langle F_{3sg} \langle \boxed{1} \rangle = \langle \text{compró} \rangle, \left[ \begin{array}{l} \textit{word} \\ \text{SYN } \boxed{3} \left[ \begin{array}{l} \text{HEAD } \left[ \begin{array}{l} \textit{verb} \\ \text{AGREE } \left[ \begin{array}{l} \text{PER } 3 \\ \text{NUM } \textit{sg} \end{array} \right] \end{array} \right] \\ \text{SUBCAT } \boxed{4} \end{array} \right] \\ \text{SEM } \boxed{5} \end{array} \right] \right\rangle \end{array} \right]$$

Un molde general para las reglas léxicas derivativas

$$\left[ \begin{array}{l} d\text{-rule} \\ \text{INPUT} \left\langle X, \left[ \begin{array}{l} \text{lexeme} \\ \text{SYN} / \boxed{3} \end{array} \right] \right\rangle \\ \text{OUTPUT} \left\langle Y, \left[ \begin{array}{l} \text{lexeme} \\ \text{SYN} / \boxed{3} \end{array} \right] \right\rangle \end{array} \right]$$

**Una versión de la Regla léxica pasiva**

$$\left[ \begin{array}{l} d\text{-rule} \\ \text{INPUT} \left\langle \boxed{1}, \left[ \begin{array}{l} \text{lexeme} \\ \text{SYN} \left[ \begin{array}{l} \text{HEAD} [\textit{verb}] \\ \text{SUBCAT} \langle \text{NP} \boxed{3} \oplus \text{NP} \boxed{4}, \boxed{A} \rangle \end{array} \right] \\ \text{SEM} \boxed{2} \end{array} \right] \right\rangle \\ \text{OUTPUT} \left\langle \text{F}_{PSP} \langle \boxed{1} \rangle, \left[ \begin{array}{l} \text{lexeme} \\ \text{SYN} \left[ \begin{array}{l} \text{HEAD} [\textit{partpass}] \\ \text{SUBCAT} \langle \text{NP} \boxed{4} \oplus \boxed{A}, \text{PP} \left[ \begin{array}{l} \text{P} = \text{por} \\ \text{NP} \boxed{3} \end{array} \right] \end{array} \right] \rangle \end{array} \right] \right\rangle \\ \text{SEM} \boxed{2} \end{array} \right] \right]$$

**Aplicando nuestra regla léxica pasiva**

$$\left\langle \text{compr-}, \left[ \begin{array}{l} \text{lexeme} \\ \text{SYN} \left[ \begin{array}{l} \text{HEAD} [\textit{verb}] \\ \text{SUBCAT} \langle \text{NP} [\text{SEM} [\text{INDEX} \boxed{46}]] \oplus \text{NP} [\text{SEM} [\text{INDEX} \boxed{47}]] \rangle \end{array} \right] \\ \text{INDEX} \boxed{45}s \\ \text{SEM} \left[ \text{RESTR} \left\langle \left[ \begin{array}{l} \text{RELN comprar} \\ \text{SIT} \boxed{45} \\ \text{COMPRADOR} \boxed{46}i \\ \text{COMPRADO} \boxed{47}j \end{array} \right] \right\rangle \right] \end{array} \right] \right\rangle$$

$$\begin{array}{c}
\left[ \begin{array}{c}
d\text{-rule} \\
\text{INPUT} \left\langle \begin{array}{c} \boxed{1} \text{compr-}, \\ \left[ \begin{array}{c} \text{lexeme} \\ \text{SYN} \left[ \begin{array}{c} \text{HEAD} [\textit{verb}] \\ \text{SUBCAT} \left\langle \text{NP}[\boxed{4}] \text{SEM}[\text{INDEX } \boxed{46}] \oplus \text{NP}[\boxed{6}] \text{SEM}[\text{INDEX } \boxed{47}] \right\rangle \right] \\ \text{SEM } \boxed{5} \left[ \begin{array}{c} \text{INDEX } \boxed{45}s \\ \text{RESTR} \left\langle \begin{array}{c} \text{RELN comprar} \\ \text{SIT } \boxed{45} \\ \text{COMPRADOR } \boxed{46}i \\ \text{COMPRADO } \boxed{47}j \end{array} \right\rangle \right] \end{array} \right] \right\rangle \\
\text{OUTPUT} \left\langle \text{F}_{PSP}(\boxed{1}) = \text{comprad-}, \left[ \begin{array}{c} \text{lexeme} \\ \text{SYN} \left[ \begin{array}{c} \text{HEAD} [\textit{part-pass}] \\ \text{SUBCAT} \left\langle \text{NP}[\boxed{6}] \oplus \text{PP} \left[ \begin{array}{c} \text{P = por} \\ \text{NP } \boxed{4} \end{array} \right] \right\rangle \right] \\ \text{SEM } \boxed{5} \end{array} \right] \right\rangle \end{array} \right] \\
\left\langle \text{comprad-} \right\rangle, \left[ \begin{array}{c} \text{lexeme} \\ \text{SYN} \left[ \begin{array}{c} \text{HEAD} [\textit{part-pass}] \\ \text{SUBCAT} \left\langle \text{NP}[\text{SEM}[\text{INDEX } \boxed{47}]] \oplus \text{PP} \left[ \begin{array}{c} \text{P = por} \\ \text{NP } [\text{SEM}[\text{INDEX } \boxed{46}]] \end{array} \right] \right\rangle \right] \\ \text{SEM } \boxed{5} \left[ \begin{array}{c} \text{INDEX } \boxed{45}s \\ \text{RESTR} \left\langle \begin{array}{c} \text{RELN comprar} \\ \text{SIT } \boxed{45} \\ \text{COMPRADOR } \boxed{46}i \\ \text{COMPRADO } \boxed{47}j \end{array} \right\rangle \right] \end{array} \right] \right\rangle \end{array} \right]
\end{array}
\end{array}$$

**Regla léxica para participios masculinos singulares**

$$\begin{array}{c}
\left[ \begin{array}{c}
i\text{-rule} \\
\text{INPUT} \left\langle \begin{array}{c} \boxed{1}, \\ \left[ \begin{array}{c} \text{lexeme} \\ \text{SYN } \boxed{3} \left[ \begin{array}{c} \text{HEAD } \textit{part-pass} \\ \text{SUBCAT } \boxed{4} \end{array} \right] \\ \text{SEM } \boxed{5} \end{array} \right] \right\rangle \\
\text{OUTPUT} \left\langle \text{F}_{\textit{masc-sg}}(\boxed{1}) \right\rangle \left[ \begin{array}{c} \text{word} \\ \text{SYN } \boxed{3} \left[ \begin{array}{c} \text{HEAD} \left[ \begin{array}{c} \textit{verb} \\ \text{AGREE} \left[ \begin{array}{c} \text{GEN } \textit{masc} \\ \text{NUM } \textit{sg} \end{array} \right] \end{array} \right] \\ \text{SUBCAT } \boxed{4} \end{array} \right] \\ \text{SEM } \boxed{5} \end{array} \right] \right\rangle
\end{array}
\right]
\end{array}$$

**Regla léxica para participios femeninos singulares**

$$\begin{array}{c}
\textit{i-rule} \\
\left[ \begin{array}{c}
\text{INPUT} \left\langle \begin{array}{c} \textit{lexeme} \\ \text{[1]} \text{ SYN } \begin{bmatrix} \text{HEAD } \textit{part-pass} \\ \text{SUBCAT } \text{[4]} \end{bmatrix} \\ \text{SEM } \text{[5]} \end{array} \right\rangle \\
\\
\text{OUTPUT} \left\langle \begin{array}{c} \textit{word} \\ \text{F}_{\textit{masc-sg}} \text{[1]} \text{ SYN } \begin{bmatrix} \text{HEAD } \begin{bmatrix} \textit{part-pass} \\ \text{AGREE } \begin{bmatrix} \text{GEN fem} \\ \text{NUM sg} \end{bmatrix} \end{bmatrix} \\ \text{SUBCAT } \text{[4]} \end{bmatrix} \\ \text{SEM } \text{[5]} \end{array} \right\rangle
\end{array} \right]
\end{array}$$

**Aplicando nuestra regla flexiva para participios**

$$\begin{array}{c}
\left\langle \left\langle \text{comprad-} \right\rangle, \begin{array}{c} \textit{lexeme} \\ \text{SYN} \begin{bmatrix} \text{HEAD } \textit{part-pass} \\ \text{SUBCAT } \left\langle \text{NP} \left[ \text{SEM} \left[ \text{INDEX } \text{[47]} \right] \right] \oplus \text{PP} \left[ \begin{array}{c} \text{P = por} \\ \text{NP} \left[ \text{SEM} \left[ \text{INDEX } \text{[46]} \right] \right] \end{array} \right] \right\rangle \end{bmatrix} \\ \text{SEM } \text{[5]} \begin{bmatrix} \text{INDEX } \text{[45]} \textit{s} \\ \text{RESTR} \left\langle \begin{array}{c} \text{RELN comprar} \\ \text{SIT } \text{[45]} \\ \text{COMPRADOR } \text{[46]} \textit{i} \\ \text{COMPRADO } \text{[47]} \textit{j} \end{array} \right\rangle \end{bmatrix} \end{array} \right\rangle \right] \\
\\
\left[ \begin{array}{c}
\text{INPUT} \left\langle \left\langle \text{comprad-} \right\rangle, \begin{array}{c} \textit{lexeme} \\ \text{SYN } \text{[4]} \begin{bmatrix} \text{HEAD } \textit{part-pass} \\ \text{SUBCAT } \left\langle \text{NP} \left[ \text{SEM} \text{[5]} \left[ \text{INDEX } \text{[47]} \right] \right] \oplus \text{PP} \left[ \begin{array}{c} \text{P = por} \\ \text{NP} \left[ \text{SEM} \left[ \text{INDEX } \text{[46]} \right] \right] \end{array} \right] \right\rangle \end{bmatrix} \\ \text{SEM } \text{[5]} \begin{bmatrix} \text{INDEX } \text{[45]} \textit{s} \\ \text{RESTR} \left\langle \begin{array}{c} \text{RELN comprar} \\ \text{SIT } \text{[45]} \\ \text{COMPRADOR } \text{[46]} \textit{i} \\ \text{COMPRADO } \text{[47]} \textit{j} \end{array} \right\rangle \end{bmatrix} \end{array} \right\rangle \right] \\
\\
\text{OUTPUT} \left\langle \left\langle \text{comprado} \right\rangle, \begin{array}{c} \textit{word} \\ \text{SYN } \text{[4]} \begin{bmatrix} \text{HEAD } \begin{bmatrix} \text{AGREE } \begin{bmatrix} \text{GEN masc} \\ \text{Num sg} \end{bmatrix} \end{bmatrix} \\ \text{SEM} \text{[5]} \end{bmatrix} \end{array} \right\rangle \right]
\end{array}
\end{array}$$

$$\left[ \begin{array}{c} \text{word} \\ \text{SYN } [4] \\ \text{SEM} \left[ \begin{array}{c} \text{INDEX } [45]s \\ \text{RESTR} \left\langle \begin{array}{c} \text{RELN comprar} \\ \text{SIT } [45] \\ \text{COMPRADOR } [46]i \\ \text{COMPRADO } [47]j \end{array} \right\rangle \end{array} \right] \end{array} \right] \\
\left[ \begin{array}{c} \text{HEAD} \left[ \begin{array}{c} \text{part-pass} \\ \text{AGREE} \left[ \begin{array}{c} \text{GEN masc} \\ \text{NUM sg} \end{array} \right] \end{array} \right] \\ \text{SUBCAT} \left\langle \text{NP} \left[ \text{SEM} [5] \left[ \text{INDEX } [47] \right] \right] \oplus \text{PP} \left[ \begin{array}{c} \text{P = por} \\ \text{NP} \left[ \text{SEM} \left[ \text{INDEX } [49] \right] \right] \end{array} \right] \right\rangle \end{array} \right] \end{array} \right]$$

|  
comprado

**el verbo *ser***

$$\left\langle \text{fue,} \left[ \begin{array}{c} \text{word} \\ \text{SYN} \left[ \begin{array}{c} \text{HEAD} \left[ \begin{array}{c} \text{verb} \\ \text{AGREE } [4] \left[ \begin{array}{c} \text{NUM sing} \\ \text{PER 3} \end{array} \right] \end{array} \right] \\ \text{SUBCAT} \left\langle [2] \oplus [3] \left[ \begin{array}{c} \text{SYN} \left[ \begin{array}{c} \text{part-pass} \\ \text{AGREE } [4] \\ \text{SUBCAT} \left\langle [2] \oplus \right\rangle \\ \text{SEM} \left[ \text{INDEX } [1] \right] \end{array} \right] \end{array} \right] \right\rangle \end{array} \right] \end{array} \right] \right\rangle$$

**Construyendo una estructura pasiva**

