## Chapter 4, Problem 4: Complements and Specifiers in Pipil

A. The VPs in (i), (iii) and (vii) are head-initial, just like English VPs, so the same Head-Complement Rule used for English will work for Pipil as well (for the VPs, at least).

$$\begin{bmatrix} phrase & & & \\ \text{VAL} & \begin{bmatrix} \text{COMPS} & \langle \ \rangle \end{bmatrix} \end{bmatrix} \rightarrow \mathbf{H} \begin{bmatrix} word & & \\ \text{VAL} & \begin{bmatrix} \text{COMPS} & \langle \ \mathbb{I}, \ ..., \ \mathbb{m} \ \rangle \end{bmatrix} \end{bmatrix} \ \ \mathbb{1} \ ... \ \ \mathbb{m}$$

B. Pipil needs two Head-Specifier Rules. The order of the head and specifier is different for NP than for S. The rules could look like this:

Rule for S:

$$\begin{bmatrix} phrase \\ \text{HEAD} & verb \\ \text{VAL} & \begin{bmatrix} \text{SPR} & \langle \ \rangle \end{bmatrix} \end{bmatrix} \rightarrow \mathbf{H} \begin{bmatrix} \text{VAL} & \begin{bmatrix} \text{SPR} & \langle \ \square \ \rangle \end{bmatrix} \end{bmatrix} \ \ \square$$

Rule for NP:

$$\begin{bmatrix} phrase \\ \text{HEAD} & noun \\ \text{VAL} & \begin{bmatrix} \text{SPR} & \langle \ \ \ \ \end{bmatrix} \end{bmatrix} \rightarrow \square \quad \mathbf{H} \begin{bmatrix} \text{VAL} & \begin{bmatrix} \text{SPR} & \langle \ \ \ \ \end{bmatrix} \\ \text{COMPS} \quad \langle \ \rangle \end{bmatrix} \end{bmatrix}$$