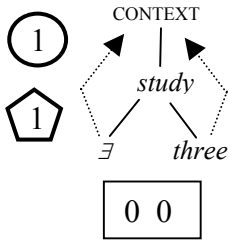


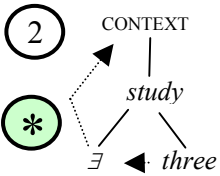
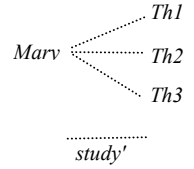
## THE TWO INTERPRETATIONS OF THE SENTENCE

### A student studied three theorems



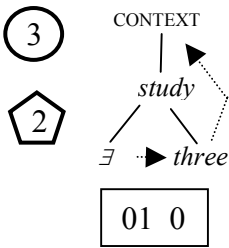
There is a student (Mary), who studied three theorems (Th1, Th2 and Th3).

$$\begin{aligned} &\exists x \exists y_1 \exists y_2 \exists y_3 \\ &[y_1 \neq y_2 \neq y_3 \wedge \text{student}'(x) \wedge \\ &\forall y [(y=y_1 \vee y=y_2 \vee y=y_3) \rightarrow \text{theorem}'(y)] \wedge \\ &\forall y [(y=y_1 \vee y=y_2 \vee y=y_3) \rightarrow \text{study}'(x,y)]] \end{aligned}$$



Nothing can depend on an existential.

$$0 \ 00$$



There are three theorems (Th1, Th2 and Th3) and for each theorem there is a students who study it.

$$\begin{aligned} &\exists y_1 \exists y_2 \exists y_3 [y_1 \neq y_2 \neq y_3 \wedge \\ &\forall y [(y=y_1 \vee y=y_2 \vee y=y_3) \rightarrow \text{theorem}'(y)] \wedge \\ &\forall y [(y=y_1 \vee y=y_2 \vee y=y_3) \rightarrow \\ &\quad \exists x [\text{student}'(x) \wedge \text{study}'(x, y)]]] \end{aligned}$$

