Suppose variable declaration is defined as
\[ \text{var } x: T \cdot P \quad = \quad \exists x: \text{undefined} \cdot \exists x': T \cdot P \]
What are the characteristics of this sort of declaration? Look at the example
\[ \text{var } x: \text{int} \cdot \text{ok} \]

According to this definition of local variable declaration, the variable initially has the value \textit{undefined}, and has a final value of type \( T \). In the example, suppose there is one nonlocal variable \( y \). Then
\[
\begin{align*}
\text{var } x: \text{int} \cdot \text{ok} & \quad = \quad \exists x: \text{undefined} \cdot \exists x': \text{int} \cdot \text{ok} \\
& \quad = \quad \exists x: \text{undefined} \cdot \exists x': \text{int} \cdot x' = x \land y' = y \\
& \quad = \quad \exists x: \text{undefined} \cdot x: \text{int} \land y' = y \\
& \quad = \quad \text{undefined: int} \land y' = y
\end{align*}
\]
We cannot evaluate \( \text{undefined: int} \). If it's \( \bot \), then \text{var } x: \text{int} \cdot \text{ok} \ is unimplementable.