

$[\text{var}_{\text{ns}}]$	$\frac{\langle D_V, env_V[x \mapsto l], sto[l \mapsto v][\text{next} \mapsto \text{new } l] \rangle \rightarrow_D (env'_V, sto')}{\langle \text{var } x := a; D_V, env_V, sto \rangle \rightarrow_D (env'_V, sto')}$ <p>where $v = \mathcal{A}[a](sto \circ env_V)$ and $l = sto \text{ next}$</p>
$[\text{none}_{\text{ns}}]$	$\langle \varepsilon, env_V, sto \rangle \rightarrow_D (env_V, sto)$

Table 3.5: Natural semantics for variable declarations using locations