Given a domain $D$ with elements $d \in D$:

$$
\begin{aligned}
\text{configurations} \quad \sigma \quad &::= \quad \langle S;\ e \rangle \ \mid\ \textbf{error} \\
\text{expressions} \quad e \quad &::= \quad x \mid v \mid e\ e \mid \text{get}\ e\ e \mid \\
& \qquad \text{put}\ e\ e \mid \text{new} \mid \text{reify}\ e \\
\text{values} \quad v \quad &::= \quad l \mid Q \mid \lambda x.\ e \\
\text{query set literals} \quad Q \quad &::= \quad \{d_1, d_2, \ldots, d_n\} \mid \\
& \qquad \{d \mid pred(d)\} \\
& \qquad (\text{where } pred(d) \text{ is computable}) \\
\text{stores} \quad S \quad &::= \quad [l_1 \mapsto d_1, l_2 \mapsto d_2, \ldots]
\end{aligned}
$$

**Figure 2.** Syntax for $\lambda_{\text{par}}$.