```
id = e;
s :=
                 type id = cons_1 | \dots | cons_2;
                                                                                                                                                                     L-Access
                                                                                                                                                                         e_1 \succ e_1'
                                                                                             L-PrimOp
                                                                                                                                 L-App
                                                                                                                                                                                                                                                                                                             case-pat
                                                                                                                                                                    e_1.e_2 \succ e'_1.e_2
                                                                                                                                                                                                                                                     n-Block
                                                                                                                                    e_1 \succ e_1'
                                                                                                   e_1 \succ e_1'
                                                                                                                                                                                                                                                                                                                                                   p_m \succ p'_m
                  literal
                                                                                                                                                                                                                                                                     e_1 \succ e_1'
                                                                                                                                                                     R-Access
                                                                                                                                e_1 e_2 \succ e_1' e_2
                                                                                             e_1 \circ e_2 \succ e_1' \circ e_2
                                                                                                                                                                                                                                                                                                               case e [ p_1 \Rightarrow e_1 | \dots | p_m \Rightarrow e_m | \dots | p_n \Rightarrow e_n ] \succ
                 e_1 \circ e_2
                                                                                                                                                                                                                                                    \{e_1;\ldots;e_n\}\succ\{e'_1;\ldots;e_n\}
                                                                                                                                                                       e_2 \succ e_2'
                                                                                                                                                                                                                                                                                                                  case e [p_1 \Rightarrow e_1 | \dots | p'_m \Rightarrow e_m | \dots | p_n \Rightarrow e_n]
                 e_1 e_2
                                                                                             R-PrimOp
                                                                                                                                 R-App
                                                                                                                                                                     v.e_2 \succ v.e_2'
                                                                                                                                                                                                                                                     Block-Kill
                                                                                                                                \frac{e_2 \succ e_2'}{v \ e_2 \succ v \ e_2'}
                 e_1.e_2
                                                                                                 e_2 \succ e_2'
                                                                                                                                                                                                                                                                                                             case-red
                                                                                                                                                                                                                                                     \{\overline{v}; e_2; \dots; e_n\} \succ \{e_2; \dots; e_n\}
                                                                                                                                                                     Access
                 case e [pat_1 \Rightarrow e_1 | \dots | pat_n \Rightarrow e_n]
                                                                                                                                                                                                                                                                                                                                         e \succ e'
                                                                                             \overline{v} \circ e_2 \succ \overline{v} \circ e_2'
                                                                                                                                                                     (e_1,\cdots,\overline{v_m},\cdots,e_n).\overline{m}\succ\overline{v_m}
                 (e_1,\cdots,e_n)
                                                                                                                                                                                                                                                                                                               case e [p_1 \Rightarrow e_1 | \dots | p_n \Rightarrow e_n] \succ
                                                                                                                                                                                                                                                     1-Block
                                                                                             PrimOp
                                                                                                                                Beta
                 \{e_1;\cdots;e_n\}
                                                                                                                                                                                                                                                     \{\overline{v}\} \succ \overline{v}
                                                                                                                                                                                                                                                                                                                  case e' [ p_1 \Rightarrow e_1 | \dots | p_n \Rightarrow e_n ]
                                                                                            \overline{v_1} \circ \overline{v_2} \succ \overline{v_1 \circ v_2}
                                                                                                                                 (\x . e)v \succ e[v/x]
                                                                                                                                                                     n-Tup
                   id \cdot e
                                                                                                                                                                                                                                                                                                           TODO: Formalize case
                                                                                                                                                                                                e_m \succ e'_m
                                                                                                                                                                     (e_1, \cdots, e_m, \cdots, e_n) \succ (e_1, \cdots, e'_m, \cdots, e_n)
pat := id | _{-} | e_1 e_2 | (e_1, \dots, e_n)
```