

## when-after<sup>11,40</sup>

when-after( $e; info; pred?; init; Trans; val; time$ )  
 $\equiv_{\text{def}}$  if first( $e$ )  
  then let  $s = \lambda x. \text{init}(\text{loc}(e), x) + \text{time}(e)$  in  $\langle s, \text{Trans}(\text{loc}(e), \text{kind}(e), \text{val}(e), s) \rangle$   
  else let  $s = \text{when-after}(\text{pred}(e); info; pred?; init; Trans; val; time).2$   
     $+ (\text{time}(e)) - (\text{time}(\text{pred}(e)))$  in  $\langle s, \text{Trans}(\text{loc}(e), \text{kind}(e), \text{val}(e), s) \rangle$   
  fi

*clarification:*

when-after( $e; info; pred?; init; Trans; val; time$ )  
 $\equiv_{\text{def}}$  if first( $pred?; e$ )  
  then let  $s = \lambda x. \text{init}(\text{loc}(info; e), x) + \text{time}(e)$  in  
     $\langle s, \text{Trans}(\text{loc}(info; e), \text{kind}(info; e), \text{val}(e), s) \rangle$   
  else let  $s = \text{when-after}(\text{pred}(pred?; e); info; pred?; init; Trans; val; time).2$   
     $+ (\text{time}(e)) - (\text{time}(\text{pred}(pred?; e)))$  in  
     $\langle s, \text{Trans}(\text{loc}(info; e), \text{kind}(info; e), \text{val}(e), s) \rangle$   
  fi  
*(recursive)*