

## **nonempty-es-interface-history**<sup>11,40</sup>

$\forall es:\text{ES}, A:\text{Type}, X:\text{AbsInterface}(A \text{ List}), e:\text{E}.$   
 $(0 < \|\text{es-interface-history}(es;X;e)\|)$   
 $\iff (\exists e':\text{E}. ((\uparrow(e' \in_b X)) \& e' \leq_{\text{loc}} e \& (0 < \|X(e')\|)))$