

**rel-pre-preserving**<sup>11,40</sup>

$f$  is  $R$ -pre-preserving on  $P \equiv_{\text{def}} f$  is  $R$ - $R$ -pre-preserving on  $P$

*clarification:*

$\text{rel-pre-preserving}(es;f;P;R) \equiv_{\text{def}} \text{Q-R-pre-preserving}(es;f;P;R;R)$