

## retraction-fun-path<sup>11,40</sup>

$\forall T:\text{Type}, f:(T \rightarrow T), h:(T \rightarrow \mathbb{N}).$

$(\forall x:T. (f(x) = x) \vee ((h(f(x))) < (h(x))))$

$\Rightarrow (\forall L:(T \text{ List}), x, y:T. y=f*(x) \text{ via } L \Rightarrow ((x = y) \vee ((h(y)) < (h(x))))$