Inference at $*$ 1
of proof for Lemma squash_thru_equiv_rel:

1. T : Type
2. E : $T \to T \to \mathbb{P}$
3. $\downarrow((\forall a{:}T.\ E(a,a))$
   & $(\forall a,\ b{:}T.\ E(a,b) \Rightarrow E(b,a))$
   & $(\forall a,\ b,\ c{:}T.\ E(a,b) \Rightarrow E(b,c) \Rightarrow E(a,c)))$
4. a : T

$\vdash \downarrow E(a,a)$
by ((D 3)
CollapseTHEN (D 0))·

1:

3. $(\forall a{:}T.\ E(a,a))$
   & $(\forall a,\ b{:}T.\ E(a,b) \Rightarrow E(b,a))$
   & $(\forall a,\ b,\ c{:}T.\ E(a,b) \Rightarrow E(b,c) \Rightarrow E(a,c))$
4. a : T

$\vdash E(a,a)$
.