trans_rel_func_wrt_sym_self[12,41]

$\forall T$:Type, R:($T \to T \to \mathbb{P}$).
Trans(T;x,y.$R(x,y)$)
$\Rightarrow$ {$\forall a,\ a',\ b,\ b'$:T.
  Symmetrize(x,y.$R(x,y)$;a;b) $\Rightarrow$ Symmetrize(x,y.$R(x,y)$;a';b') $\Rightarrow$ ($R(a,a') \iff R(b,b')$)}

ProofTree

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http://www.nuprl.org/FDLcontent/p0_942988_/p15_4319_{trans_rel_func_wrt_sym_self}.html