Inference at $*$
of proof for Lemma connex_functionality_wrt_implies:

$\vdash \forall T$:Type, R, R':$(T \to T \to \mathbb{P})$.
(∀x, y:T. {$R(x,y) \Rightarrow R'(x,y)$}) ⇒ {Connex($T$;$x$,$y$.$R(x,y)$) ⇒ Connex($T$;$x$,$y$.$R'(x,y)$)}
by ((((Unfolds "guard connex" 0)
CollapseTHEN (RepD))·)
CollapseTHENA (
(Auto_aux (first_nat 1:n) ((first_nat 1:n),(first_nat 3:n)) (first_tok :t) inil_term)))·

1:

1. T : Type
2. R : $T \to T \to \mathbb{P}$
3. R' : $T \to T \to \mathbb{P}$
4. ∀x, y:T. $R(x,y) \Rightarrow R'(x,y)$
5. ∀x, y:T. $R(x,y) \vee R(y,x)$
6. x : T
7. y : T

$\vdash R'(x,y) \vee R'(y,x)$

.

---

http://www.nuprl.org/FDLcontent/p0_942988_/p121_80318_{connex_functionality_wrt_implies}.html