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

1. T : Type
2. R : $T \rightarrow T \rightarrow \mathbb{P}$
3. $\forall a, b, c{:}T.\ R(a,b) \Rightarrow R(b,c) \Rightarrow R(a,c)$
4. a : T
5. b : T
6. c : T
7. $R(a,b)$
8. $R(b,c)$
9. $\neg R(c,b)$

$\vdash R(a,c)$

 by ((FHyp 3 [7;8])
 CollapseTHEN ((Auto_aux (first_nat 1:n) ((first_nat 1:n
 ),(first_nat 4:n)) (first_tok :t) inil_term)))·

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