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

1. T : Type
2. R : $T \to T \to$ Type
3. Q : $T \to \mathbb{P}$
4. $\forall a{:}T.\ R(a,a)$
5. $\forall a, b{:}T.\ R(a,b) \Rightarrow R(b,a)$
6. $\forall a, b, c{:}T.\ R(a,b) \Rightarrow R(b,c) \Rightarrow R(a,c)$
7. a : $\{z{:}T \mid Q(z)\}$

$\vdash R(a,a)$

 by ((BHyp 4)
 CollapseTHEN ((Auto_aux (first_nat 1:n) ((first_nat 1:n),(first_nat 3:n
 )) (first_tok :t) inil_term)))·

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