A match between certain combinators and some implicational formulas goes back to the work of H. B. Curry in the 1940s. What is known nowadays as the implicational fragment of the relevance logic $R$ was formulated as an axiom system by A. Church in the early 1950s. The so-called Curry–Howard isomorphism is well-known for the implicational fragment of intuitionistic logic and $\{S,K\}$, and it has been extended to certain relevance logics and other combinatory bases. This correspondence usually links proofs in natural deduction or axiomatic calculi to inhabitants of the theorems proved.

We proved in two papers (Notre Dame Journal of Formal Logic 53 (2012): 491–509; Journal of Symbolic Logic 78 (2013): 214–236) that pure ticket entailment is decidable; a core component of our proof was the sequent calculus $LT^\bot\rightarrow$, which is an extension of $LT^\bot$. Then we went on (in Bimbó and Dunn (2013b)) to describe an algorithm to create a BB'IW-inhabitant from a proof of a theorem of $T^\rightarrow$ in the sequent calculus $LT^\bot$. In this talk, we adopt a similar approach, and we show how to extract concrete BB'IWT inhabitants from sequent calculus proofs of $R^\rightarrow$ theorems. (Received September 15, 2013)