PETER SCHROEDER-HEISTER, *An alternative implication-left schema for the sequent calculus.*
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As an alternative to Gentzen’s schema (→L) for the introduction of implication on the left side of the sequent sign in the intuitionistic sequent calculus LJ we propose the schema (→L)^⊙:

\[
\begin{array}{c}
\text{(→L)} \\
\Gamma \vdash A, \Delta, B \vdash C \\
\hline
\Gamma, \Delta, A \to B \vdash C
\end{array}
\quad \quad \quad
\begin{array}{c}
\text{(→L)^⊙} \\
\Gamma \vdash A \to B \vdash B
\end{array}
\]

In the absence of cut, (→L)^⊙ is weaker than (→L). In the system based on (→L)^⊙, cut is admissible except for cuts whose left premiss is the conclusion of (→L)^⊙, i.e., cuts of the following restricted form:

\[
\begin{array}{c}
\text{(→L)^⊙} \\
\hline
\text{(cut)}
\end{array}
\quad \quad \quad
\begin{array}{c}
\Gamma \vdash A, \Delta \vdash C
\end{array}
\]

Using cut in this restricted form, (→L) and (→L)^⊙ can be shown to be equivalent. Unlike full cut, applications of restricted cut do not compromise the subformula property and are harmless in this sense. Philosophically, (→L)^⊙ is motivated by the interpretation of implications as rules [1, 2] and can be viewed as a direct translation of *modus ponens* into the sequent calculus.
