Beyond System P – Convergence Results for Conditional Logics with a Connexive Twist

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In recent decades two systems, System P and System R, have been found to characterize a broad range of semantics for conditionals – both modal and probabilistic. The paper adds to this convergence result by showing that Lewis’s System V and Burgess’s System V* are nothing but System R. It then investigates the role of connexive principles in both logics. Firstly, an impossibility result is stated as to why these logics only allow default versions of connexive principles. Secondly, it is shown that the default versions imply a proof theoretic dependency of two core principles of both systems – Cautious Monotonicity and Rational Monotonicity, where the latter is specific to System R. To achieve this result a proof theoretic principle is required that renders formulae provable if they are derivable from both provability and non-provability assumptions.