

1116-03-1667

**Katalin Bimbó\*** (bimbo@ualberta.ca), University of Alberta, Department of Philosophy, 2–40 Assiniboia Hall, Edmonton, Alberta T6G2E7, Canada. *Connections between relational semantics for  $E_{\rightarrow}$  and  $E$ .*

$E_{\rightarrow}$  can be seen (and has been claimed) to capture the core features of entailment. There is a well-known relational semantics for  $E$  (the logic of entailment) and  $E_+$  (the positive fragment of  $E$ ). There are many variations on these semantics. (See e.g., Bimbó, K. and J. M. Dunn, *Generalized Galois Logics: Relational Semantics of Nonclassical Logical Calculi*, vol. 188 of CSLI Lecture Notes, Stanford, CA, 2008.) We show that the straightforward *restriction* of the relational semantics for  $E$  to a semantics for  $E_{\rightarrow}$  is sound, but not complete with several naturally emerging notions that could replace prime filters in the completeness proof for  $E$  (or  $E_+$ ). The addition of extensional conjunction or of intensional conjunction and truth alleviates the previous difficulties in the semantics, which led to the idea of a modification in the definition of the canonical accessibility relation. We prove that  $E_{\rightarrow}$  is complete for this semantics when prime filters are replaced by cones. We also show that this semantics *extends* to the usual relational semantics for  $E$ , because the stronger definition of the accessibility relation simplifies in the presence of all the connectives of  $E$ . (Received September 21, 2015)