

- RODOLFO C. ERTOLA-BIRABEN, *On the univocity of the usual connectives*.
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The main purpose of my talk is to provide certain considerations in order that the models in [2] are easy to understand.

Some of the operations in [2] result from considering the class of algebras $(A; \rightarrow, 1)$ of type $(2, 0)$ such that

$$\begin{aligned} y \rightarrow (x \rightarrow y) &= 1, \\ [z \rightarrow (x \rightarrow y)] \rightarrow [(z \rightarrow x) \rightarrow (z \rightarrow y)] &= 1, \\ \text{if } 1 \rightarrow y = 1, \text{ then } y &= 1. \end{aligned}$$

We call them *pre-Hilbert algebras* as they properly include the usual class of Hilbert algebras, which may be defined adding the following condition to the ones given:

$$\text{if } x \rightarrow y = 1 \text{ and } y \rightarrow x = 1, \text{ then } x = y.$$

Pre-Hilbert algebras do not form an equational class. They appear explicitly in [3, p. 392] but called “quasi I algebras”. They also appear in [1, p. 4] as a particular case of a what the author calls a “pre-algebra de Hilbert”.

Note that, contrary to the statement in footnote 6 of [2, p. 494], *both* conditionals in the proof of Theorem 7 satisfy the laws of Boolean algebra (the given models are isomorphic).

Finally, we also simplify the derivation in [2, p. 495] proving that the conditional is univocal in the $\{\vee, \rightarrow\}$ -fragment of classical logic.

[1] ANTONIO DIEGO, *Sobre álgebras de Hilbert*, Notas de Lógica Matemática, Universidad Nacional del Sur, 1965.

[2] RODOLFO C. ERTOLA-BIRABEN AND BRANDEN FITELSON, *Univocity of Intuitionistic and Classical Connectives*, *The Bulletin of Symbolic Logic*, vol. 31 (2025), no. 3, pp. 488–497.

[3] ALFRED HORN, *The separation theorem of intuitionist propositional calculus*, *The Journal of Symbolic Logic*, vol. 27 (1962), no. 4, pp. 391–399.