

Generalised state descriptions for strong first-degree entailment logic extensions

© A.A. Belikov

Lomonosov Moscow State University, Moscow, 119991, Russia

The article proposes a number of generalised state description semantics for certain Dunn — Belnap logic extensions. The extensions under investigation include the Rivieccio — Pietz (ETL) and Shramko — Zaitsev — Belikov (NFL) logics. Generalised state descriptions form the basis for defining entailment relations that enable us to formalise the corresponding logics.

Keywords: *generalised state descriptions, relevance logic, logical semantics, paraconsistency, paracompleteness*

REFERENCES

- [1] Dunn J.M., Restall G. *Relevance logic. Handbook of philosophical logic.* Springer, Netherlands, 2002, pp. 1–128.
- [2] Dunn J.M. *Studia Logica*, 2000, vol. 66, no. 1, pp. 5–40.
- [3] Voyshvillo E.K. *Filosofsko-metodologicheskie aspekty relevantnoy logiki* [Philosophical and methodological aspects of relevance logic]. Moscow, Editorial URSS Publ., 2011, 139 p.
- [4] Smirnova E.D. *Logika i filosofiya* [Logic and philosophy]. Moscow, ROSSPEN; Russian Political Encyclopedia Press, 1996, 304 p.
- [5] Pietz A., Rivieccio U. *Journal of Philosophical Logic*, 2013, no. 42, pp. 125–135.
- [6] Marcos J. The value of the two values. In: *Logic without Frontiers: Festschrift for Walter Alexandre Carnielli on the Occasion of his 60th Birthday (Tributes)*. J.Y. Beziau, M.E. Coniglio, eds. College Publications, 2011, pp. 277–294.
- [7] Shramko Y., Zaitsev D., Belikov A. *Studia Logica*, 2017, vol. 105, no. 6, pp. 1291–1347.

Belikov A.A., Training and Methodology Specialist, Department of Logic, Faculty of Philosophy, Lomonosov Moscow State University. e-mail: belikov@philos.msu.ru