

- MAREK NASIENIEWSKI AND RICARDO ARTURO NICOLÁS-FRANCISCO, *On discussive logics defined on a connexive modal logic.*

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A great part of the history of discussive logic has focused on the investigation of discussive logic in regard to modal logics based on classical logic. Discussive logic D_2 was characterized in [1] by means of a translation function on the modal logic $S5$. It has been demonstrated that modal logic $S5$ is not necessary, and even weaker modal logics can be used to define the very same logic D_2 . In [2], the so-called minimal discussive logic that can be defined using a modal logic was introduced. This was introduced by a similar translation function, but using the modal logic D instead of $S5$.

In this paper, we will consider modal logics based on connexive logics that can be used to characterize systems of a minimal discussive logic. This work is important since connexive logics naturally motivate paraconsistent systems of logic, of which the discussive system constitutes one particular case (in fact, discussive logic was the first paraconsistent system of logic ever considered). We expand on the connexive modal logic introduced in [3] to present a connexive counterpart of modal logic D , and define some translation functions on this logic to obtain a discussive system of logic.

[1] STANISŁAW JAŚKOWSKI, *A propositional Calculus for inconsistent deductive systems*, *Logic and Logical Philosophy*, vol. 7 (1999), no. 7, pp. 35–56.

[2] KRYSZYNA MRUCZEK-NASIENIEWSKA AND MAREK NASIENIEWSKI, *A Kotas-Style Characterization of Minimal Discussive Logic*, *Axioms*, vol. 8 (2019), no. 4, pp. 229–248.

[3] HEINRICH WANSING, *Connexive modal logic*, *Advances in Modal Logic, Volume 5* (Renate Schmidt, Ian Pratt-Hartmann, Mark Reynolds, and Heinrich Wansing, editors), College Publications, London, 2005, pp. 367–383.