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DISCUSSIVE VERSIONS OF THE MODAL CALCULI T , B , $S4$ AND $S5$

In this paper we show that T , B , $S4$ and $S5$ can be specified by axiomatics having discussive conjunction as the sole non-extensional primitive notion, and having as postulates the discussive counterparts of some of the basic laws of classical conjunction in the classical propositional calculus. This will make clear not only that classical propositional calculus. This will make clear not only that discussive conjunction in T , B , $S4$ and $S5$ shares several properties with classical conjunction, but also that a meager set of such properties is sufficient to characterize completely these logics. It seems natural to call a modal function elementary with respect to a certain modal logic when it is possible to characterize completely this logic by means of a simple axiomatics having that modal function as the sole non-extensional primitive notion. We present axiomatics which assure the elementariness of the modal function which defines discussive conjunction with respect to T , B , $S4$ and $S5$.

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