

Axiomatising an arbitrary elementary modal logic using hybrid logic

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In a recent paper* it was shown that the modal logics of elementary classes of Kripke frames are precisely those logics that can be captured by sets S of hybrid sentences H of a certain syntactic form. Each H generates an infinite set of modal formulas called 'approximants'. Taken together, the approximants of all the H in S axiomatise the logic of the class of frames defined by S . The proof is analogous to standard proofs of Sahlqvist's theorem. I will discuss this result and its proof, concentrating of course on the hybrid aspects.

* *Hybrid formulas and elementarily generated modal logics.*
Ian Hodkinson, Notre Dame J. Formal Logic 47 (2006) 443-478.
<http://projecteuclid.org/euclid.ndjfl/1168352661>