

Frederique Janssen-Lauret

‘Ruth Barcan Marcus and Quantified Modal Logic’

Abstract: Ruth Barcan (later Ruth Barcan Marcus) published the first quantified modal logic in her mid-twenties (Barcan 1946a, 1946b, 1947). Barcan approached quantified modal logic as a calculus, proof-theoretically. Her system therefore did not assume quantification over possible worlds, as in Kripke’s now more common treatment, and her well-known Barcan Formula (really a schema) did not imply a possible-world model with constant domains as a result. I read Barcan’s 1946-47 modal logic in the context of her wider philosophical views from the ’60s, specifically the empiricist nominalism which also informed her arguments for taking ordinary proper names’ meanings to be just their bearers, not descriptions of their bearers (Barcan Marcus 1961). I make the case that her approach is philosophically well-motivated, connected to her views on reference, and well-matched to her overall views on ontology. Barcan, whose strict nominalism led her to reject posits which could not be directly observed and named, thought possible worlds unpalatable. She conceived of modal calculi as allowing us to regiment counterfactual discourse about actual existents. I show that Barcan Marcus’s ontologically parsimonious views have the advantage over Kripke’s with respect to ontological parsimony, epistemic access to possible worlds, and her position on naming, reference, and statements of identity. I conclude that her contributions ought to be recognised as the first of their kind, and that Barcan Marcus must be awarded her proper place in the canon of analytic philosophy.

Readings:

Ruth Barcan Marcus (1961) ‘Modalities and intensional languages’. *Synthese* 13: 303-322.

Frederique Janssen-Lauret (2016) [‘Committing to an Individual: Ontological Commitment, Reference, and Epistemology’](#), *Synthese*, 193(2), pp. 583-604.

Frederique Janssen-Lauret (2015) [‘Meta-Ontology, Naturalism, and the Quine-Barcan Marcus Debate’](#), in *Quine and His Place in History* (ed. G. Kemp and F. Janssen-Lauret), Palgrave Macmillan, pp. 146-167.



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Selected Publications:

Frederique Janssen-Lauret (2017) '[Susan Stebbing, Incomplete Symbols, and Foundherentist Meta-Ontology](#)', *Journal for the History of Analytical Philosophy*, 5(2), pp. 6-17.

Frederique Janssen-Lauret (2016) 'Committing to an Individual: Ontological Commitment, Reference, and Epistemology', *Synthese*, 193(2), pp. 583-604.

Frederique Janssen-Lauret (2015) 'Meta-Ontology, Naturalism, and the Quine-Barcan Marcus Debate', in *Quine and His Place in History* (ed. G. Kemp and F. Janssen-Lauret), Palgrave Macmillan, pp. 146-167.