## INTRODUCTION TO THE SPECIAL ISSUE 'VALERIE PLUMWOOD'S CONTRIBUTIONS TO LOGIC'

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The idea for the present special issue of the AJL arose when Tedder requested Badia's help in securing a scanned version of a previously unpublished paper by Australian philosopher Valerie Plumwood (1939 - 2008), also known by the last names Routley (shared with her former husband, Richard Routley) and Morell (her maiden name). The article in question 'Some False Laws of Logic' was in the Sylvan archives located in the library of the University of Queensland and had remain unpublished until today. Tedder's transcription of it constitutes the central piece of the current volume. In addition, we have included a collection of contributions related to various aspects of Valerie Plumwood's early incursions in the field of logic.

We may divide the contributions in this volume in two broad categories: (1) those engaging mostly with the technical aspects of Plumwood's contributions and (2) those which interact with her work on feminism and logic. Below we briefly summarize in two paragraphs the articles in each camp.

In Val (Routley) Plumwood: Work in Logic, Hyde provides a general account of Val Plumwood's contributions in the areas of relevant logic and more generally, non-classical logics. In Relevance through topical unconnectedness: Ackermann and Plumwood's motivational ideas on entailment, Øgaard shows that Ackermann's motivational spin on his theory of rigorous implication contains an equivalent idea to Plumwood's notion of suppression freedom. In The class of all 3-valued natural conditional variants of RM3 that are Plumwood Algebras, Blanco, López and Recio introduce 'Plumwood algebras', that

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is, logical matrices that do not verify any of *Exported Syllogism, Disjunctive Syllogism, Commutation*, and *Exportation* (the laws rejected in Plumwood's paper). Furthermore, they provide axiomatizations based on First Degree Entailment and Belnap-Dunn semantics for the logics resulting from the matrices in question. In the article *In Support of Valerie Plumwood*, Brady shows how his logic of meaning containment supports the rejection of the laws that Plumwood's paper casts doubt on. In addition, he also connects these failures to the Depth Relevance Condition.

In From Excluded Middle to Homogenization in Plumwood's Feminist Critique of Logic, Ferguson examines the role of excluded middle in generating oppressive *homogenization* and tries to clarify the relationship between Plumwood's feminist critique of logic and excluded middle from several contemporary perspectives. Furthermore, he looks at the matter of whether Plumwood's critique requires *relevance* or whether a non-relevant logic could satisfy her criteria and serve as a liberatory logic of difference. In The Liberation Argument for Inconsistent Mathematics, Mangraviti argues that classical logic's support of systemic oppression through naturalization of the logical structure of dualism can be carried over to classical mathematics, and proposes a new conception of inconsistent mathematics - queer incomaths as a liberatory activity meant to undermine said naturalization. Finally, in Feminist Logic, Literally, Restović proposes an interpretation of Plumwood's feminist critique of classical logic according to which classical logic is oppressive only when it's used to describe a particular, "dualized" or "dualizable". kind of notions. He considers five features of oppressive differentiations as proposed by Plumwood, arguing that two of them do not concern negation.

Due to an error on our, i.e. the guest editors', part one paper was published shortly after the others, and so does not fit into the above bipartite scheme. This is Robles and Mendéz's *A variety of De Morgan negations in relevant logics*, which concerns the 'star' interpretation of negation famously studied by Plumwood and Sylvan in the early 70s.

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