

Preface

I think it is fair to say that a crucial element in the maturation of a field of nonclassical logics is the existence of a resource that serves to demarcate its motivations, scope, and history. The existence of volumes such as *Relevant Logics and Their Rivals* and *Entailment: The Logic of Relevance and Necessity* provides a sense of cohesion to the field of relevant logic. A researcher interested in intuitionistic logic can be directed to *Elements of Intuitionism*, while the important points of conditional logic are cataloged in *Topics in Conditional Logic*. Without such a resource, frequently the progenitor of some family of nonclassical logics has written forcefully and abundantly enough to ensure that the shape of the family is clear.

With respect to this criterion, the field of containment logic—the family of deductive systems whose exemplar is William T. Parry’s logic of *analytic implication*—had the cards stacked against it from the onset. The initial appearance of analytic implication in 1933 was an abstract including little more than a list of axioms, a consistency proof, and some remarks from Gödel, who had taken enough of an interest in Parry’s work to make some conjectures concerning the system. During his lifetime, Parry returned to the subject in print only briefly, promoting it in his 1968 contribution to the *Library of Living Philosophers* on his teacher, C. I. Lewis, and in a small 1976 piece in the short-lived *Relevance Logic Newsletter*. Parry’s fullest exposition on containment logic in print arrived only after his death, appearing in a 1989 contribution to *Directions in Relevant Logic*. Even this piece omits Parry’s best arguments from his dissertation. In the absence of Parry’s stewardship, the field of containment logic withstood a half of a century of often unsympathetic and frequently flawed critiques without the luxury of an earnest defense.

But in spite of its detractors, Parry’s analytic implication—and the broader field of containment logic—deserves more than a footnote in the history of logic. Since I started studying the field, this has been illustrated most forcefully by the number of distinct roads that ultimately lead to a containment logic. Many of the deductive systems in the constellation of Parry’s logic have been independently discovered and introduced into the literature multiple times; in one of these cases, the system

appeared independently in different guises no fewer than *five times*. And I know that yet more redundancies have been prevented on occasions in which, *e.g.*, a talk on Parry's work alerted an audience member that a system that he or she had developed had appeared as a containment logic.

Much of this redundancy could have been avoided that had containment logic received a *Relevant Logics and Their Rivals* of its own. With such a resource, perhaps the effort would have been directed toward *developing* the field, rather than creating the proverbial wheel again and again.

This volume, I will concede, is not intended to be that *vade mecum* whose absence I am lamenting. There remain, I think, too many open questions to establish a serviceable atlas at this point. Aspects of the presentation of Halldén's SO, Sylvan's relevant containment logics, and systems described in this work like PAC—all close cousins to Parry's analytic implication—still lack crucial details. My aim for the following work, rather, is to make the case that such a volume is needed, that the research to fill in the necessary lacunae is warranted, and that the existence of such a volume—whoever produces it—will ultimately prove a boon to logicians working in a wide variety of fields.

In short, Parry's intuitions are deserving of further research and study, and I hope that the following pages serve to drive some attention towards their development.

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Thomas Macaulay Ferguson

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Ferguson, Th.M.

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