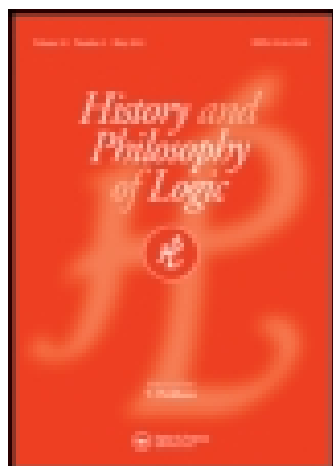


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Richard (Routley) Sylvan: Writings on Logic and Metaphysics

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Richard Sylvan (né Routley) was one of Australasia's most prolific and systematic philosophers. Though known for his innovative work in logic and metaphysics, the astonishing breadth of his philosophical endeavours included almost all reaches of philosophy. Taking the view that very basic assumptions of mainstream philosophy were fundamentally mistaken, he sought radical change across a wide range of theories. However, his view of the centrality of logic and recognition of the possibilities opened up by logical innovation in the fundamental areas of metaphysics resulted in his working primarily in these two, closely connected fields. It is this work in logic and metaphysics that is the main focus of what follows.

‘Do I contradict myself?
Very well then I contradict myself.
(I am large, I contain multitudes)’
Walt Whitman, *Song of Myself*

1. Introduction

Richard Sylvan (né Routley) was undoubtedly one of Australasia's most wide-ranging and systematic philosophers. The astonishing breadth of his philosophical work includes writings on logic, metaphysics, philosophy of language, epistemology, environmental philosophy, social philosophy, political philosophy, ethics, philosophy of science, philosophy of mind and computation theory.

A major reason for this intellectual diversity was his view that ‘received logical theory and mainstream philosophical thinking involve ... fundamentally mistaken assumptions’.¹ These mistaken assumptions were, in fact, seen as so fundamental that nothing less than ‘logical revolution’ and the abandonment of ‘the main philosophical positions of our times’ was called for. ‘The same mistaken philosophical moves ... appear over and over again in different philosophical arenas ... in metaphysics, in epistemology, in the philosophy of science, ... in ethics, in political theory, and elsewhere, in each case with serious philosophical costs’.² This view, coupled with Sylvan's desire to set things straight, led him to work in all these areas and more.

His usual method of work was to rise at dawn and write until lunch. This philosophical writing (decipherable to only a select few until typed by one such) amounted to a considerable body of work. By my reckoning at the time of his death in June 1996 he had published as sole author, joint author or editor, 10 books, 16 booklets and nearly 200 articles in academic philosophy—as well as

1 Routley 1980, iii.

2 Routley 1980, ii–iii.

numerous unpublished articles and articles contributing to general intellectual debate on social policy and environmental matters.

In addition to the wide-ranging nature of this profile outpouring of philosophy, Sylvan's work was also distinctive in character. As noted, he thought that mainstream philosophical thinking was doomed to failure and the theories he argued for were accordingly unorthodox and often highly innovative.³ Moreover he took the view that philosophy ought to strive for uniformity in its resolution of problems.

[V]irtually every philosophical problem has a range of potential resolutions. A coherent philosophy selects and develops its resolutions uniformly, with connected solutions for related problems, not a different sort of solution for every (sort of) problem.⁴

Accordingly, his work is characterized by the attempt to develop and apply these unorthodox theories in a wide range of contexts. Thus his work represents a broad, uniform and unorthodox approach to philosophical problems.

Though making a contribution to philosophy (and intellectual life more broadly) well beyond his writings in logic and metaphysics, a survey of Sylvan's work will show that the majority of it concentrates directly on issues in these two areas, and where it does not bear directly on them it typically presents them as having central underlying import. One reason, of course, was his acceptance of the idea of the centrality of logic to philosophy (see Routley 1980, iii) and one has only to look at the essays gathered together in Sylvan (2000) to see just how seriously he took this idea. (More on this below). However he was also keen to emphasize the importance of metaphysics to all reaches of philosophy and, with the possibilities opened up by research in nonclassical logic, substantial developments in metaphysics were there to pursue and pursue them he did.

2. The early period

In 1958 Routley graduated with first-class honours in both philosophy and mathematics after five years of study at Victoria University of Wellington, New Zealand. Showing early signs of what was to come, he submitted a 385 page thesis for examination for his honours degree in philosophy and the thesis, *Moral Scepticism*, was highly praised by its marker, Arthur Prior.⁵ Oxford University Press agreed to publish a condensed version thereof, but the necessary revision was never carried out. It would not be the last time that he would write so expansively, displaying such philosophical skill, foregoing the editorial work required by the established academy presses.

In early 1959 he was appointed to the University as a junior lecturer with the main task of designing and constructing a small 'mechanical-electronic computer (a task which, according to Len Goddard, he had already begun while writing his honours

3 He himself wrote in Routley 1980, vii, that '[i]t is pleasant to record that much of the material [of Routley 1980] is now regarded as far less crazy and disreputable than it was in the mid-sixties, when it was taken as a sign of early mental deterioration and of philosophical irresponsibility'.

4 Sylvan and Hyde 1993, 1.

5 Speaking at a memorial gathering for Richard after his death, his friend and colleague Len Goddard reported that Prior had awarded the thesis a mark of 95% and had subsequently commented in a reference for Richard that 'this was not so much a mark as an exclamation mark'!

thesis in ethics). Those familiar with his later successes at house-building will not be surprised to learn that the project culminated with a machine capable of calculating truth-tables—he was already showing himself to be equally gifted at both building and philosophising.

Having decided to pursue graduate studies at Princeton, in late 1959 he headed to the USA supported by a number of grants and scholarships.

As a brash young man I set out from New Zealand for Princeton University with a project of trying to repair and renovate a derelict philosophy of science, resolving many of its evident problems, through an improved logical basis and corresponding theoretical setting. This project was hardly enthusiastically welcomed at Princeton, and I made comparatively little progress on it there ...⁶

In fact he stayed only two and a half years. He was awarded an MA in June 1961, but left later that year without receiving his PhD. Nonetheless, the study of these problems in the philosophy of science continued and eventually led to substantial work in theories of implication and nonexistent objects, but the results of these enquiries were some way off.

Back in Australia John Mackie had succeeded John Anderson in the Challis Chair in Philosophy at Sydney University in 1959 and by 1962 Routley was at Sydney University lecturing in philosophy to students there, presenting, amongst other things, a course on paradoxes—his interest in them already becoming apparent.⁷

In 1964, with his partner and philosophical associate Valerie McCrae (later called Routley, now Plumwood), he moved on to an appointment at the University of New England, Armidale, in New South Wales. Len Goddard was then professor at New England, having been appointed to a lectureship in 1956 by the former professor, Denis Grey, and subsequently appointed to the chair in 1961. Goddard had been fighting alone for some time for a serious teaching and research program in formal logic in Australia and, with the support of his university and an increase in Federal Government funding to universities, he was able to make two appointments in the area of logic. Routley was one such, the appointment of David Londey, formerly at Wellington with George Hughes, another. The arrival of Routley and Londey provided the requisite critical mass to achieve Goddard's ambitious aim of establishing a centre of logic in what was then 'a tiny university set in a rural community whose dominating interests were in sheep ticks and wool'.⁸

Goddard had originally been appointed by Grey to teach formal logic and, working with C. F. Presley who was at Newcastle University at the time, had established what was one of the first comprehensive courses in modern formal logic. Traditional logic had hitherto been all that was available in most institutions in Australia, Adelaide being a notable exception where Jack Smart had been teaching logic since 1952. This dearth of modern logic was due (in no small measure) to the considerable influence of Anderson emanating from Sydney University. By 1964 however, with Routley and Londey's arrival. Goddard's vision took firm shape with the establishment of the country's first Master's course in Logic at the university, and Routley's influence on a generation of Australian logicians began.

⁶ Sylvan 2000, 7.

⁷ It was, presumably, this teaching which prompted the drafting of Routley 1962.

⁸ Goddard 1992, 174. See Routley 1984, Goddard 1992 and Martin 1992 for a more detailed account of the history of logic in the Australasian region.

The New England Group (as it is sometimes known) that formed around Goddard, Routley and Londey included students Ross Brady, Martin Bunder, Valerie Plumwood and Malcolm Rennie, and links were forged there that remained strong through the coming years. The group focussed on analysing classical logic, revealing its problems and sought to develop superior non-classical alternatives. The work done there was described by Richard as ‘heavily philosophically oriented ... [and] included work on modal logic, on the theory of implication and relevant logics and overshadowing all these, on significance and incompleteness, on logical paradoxes and many-valued resolutions of them and other puzzles’.⁹

Presley had recently written on the matter of significance logic, with his (1961) arguing for the adoption of a three-valued logic of significance for assessing arguments about meaninglessness, following on from the pioneering work of Swedish logicians like Halldén.¹⁰ Both Goddard and Routley had also been thinking independently about issues to do with significance logic for some time, their separate views on the topic later appearing in the *Australasian Journal of Philosophy*.¹¹ On finding themselves together at New England, however, they began collaborating on the topic and, in addition to further independently authored papers on the topic, in 1966 they commenced work on a book that would eventually appear in 1973 as volume one of *The Logic of Significance and Context*.¹² Their treatment of the topic was extensive, the book being over 600 pages in length, and aimed to show both why non-significant sentences should be brought within the scope of formal logic and how a formal logical treatment of this extended domain of sentences should proceed.

Already at this time themes began to emerge in Routley’s philosophy which, as we shall see, remained strong throughout his work. In a jointly authored paper with Goddard (1966) and Goddard and Routley (1966), on the related topic of quotation it is claimed, for example, that:

The grounds for refusing to countenance intensional sentence-functions ... do not seem to us at all substantial. In general they seem to depend on philosophically dubious and implicitly assumed definitions If such assumptions are challenged, however, the case for an extensional logic in general is weakened considerably.¹³

A little later, having considered and rejected a number of criticisms of quotation-functions made by Tarski, they note that:

These considerations also go some distance toward destroying Tarski’s theory of truth. The further demolition [and] undermining and replacing of levels-of-language theories is beyond the scope of this paper.¹⁴

9 Routley 1984, 133.

10 See, for example, Halldén 1949.

11 See Routley 1966a and Goddard 1966.

12 Though they always intended to produce a second volume, and Richard noted the existence of a ‘partial manuscript’ in his curriculum vitae and claimed that ‘substantial parts’ lay buried in Goddard’s ‘rich piles’ of unpublished material, (see Sylvan 1992, 44) his death has probably put paid to the prospect.

13 Goddard and Routley 1966, 40.

14 Goddard and Routley 1966, 42.

This demolition, with its accompanying rejection of standard responses to the logico-semantical paradoxes, was to come.

In addition to the major work underway on significance, Routley was also working on incompleteness—an issue closely connected with his work on existence and non-existent objects, as well as work on paradoxes. Interestingly in this regard, he appears to have independently found the method of supervaluations in 1964, two years prior to van Fraassen's publication of his famous paper on the topic.¹⁵ The method was then used in a paper completed the following year to try to deal with truth-value gaps and paradoxes of self-reference. He considered and subsequently rejected it as an approach to incompleteness.¹⁶ Work in this area was to remain a major focus of research over the ensuing years.

At about this time, joint work and discussion with Valerie Routley convinced him that the key assumption, 'the fundamental philosophical error' that generated so many philosophical problems, was what they called the Reference Theory.¹⁷ This error, levelled across the board at empiricists, idealists and materialists alike, was the acceptance of the 'naive and mistaken' view that 'all proper use of subject expressions in true or false statements is referential use, use to refer, and thus according to which truth and falsity can be entirely accounted for, semantically, in terms of reference to entities in the actual world. That is, the only factor that determines truth is reference'. On the common assumption that meaning is a function of truth the theory is sometimes expressed as a theory of meaning according to which 'the meaning of a subject expression is given by, or is a function of, its reference'.¹⁸ A perceived characteristic of the fallacious Reference Theory was 'the rejection of all discourse whose truth-value cannot be determined simply in terms of the reference of its (proper) subject-terms, particularly intensional discourse'.¹⁹

A further consequence of the fallacious theory of reference was what was termed the Ontological Assumption, the view that one cannot make true statements about what does not exist. Routley's arguments for the falsity of this theory then led, most notably, to his advocacy of noneism²⁰—a theory of objects which aims at

... a very general theory of all items whatsoever, of those that are intensional and those that are not, of those that exist and those that do not, of those that are possible and those that are not, of those that are paradoxical or defective and those that are not, of those that are significant or absurd and those that are not; it is a theory of the logic and properties and kinds of properties of all these items.²¹

The rejection of what Routley viewed as the defective foundation of much contemporary philosophy brought with it then the need to rethink philosophical approaches to intensionality, non-existence, impossibilia, paradoxicality and other 'defects', and significance and absurdity. And this is precisely what he did. His joint

15 See Routley 1980, 169, footnote 1, where he claims independent discovery of the method.

16 See Routley 1970, 297–299.

17 The earliest mention of this seems to be in Routley 1970, a paper which was submitted for publication from New England in June 1965. It is here too that we see Routley explicitly rejecting what he called the Ontological Assumption (see below).

18 Routley and Routley 1973, 234–235.

19 Routley and Routley 1973, 235.

20 Pronounced 'nonism'.

21 Routley 1980, 5–6.

work with Goddard was aimed at a detailed treatment of the last of these—significance and absurdity. He later described the resulting volume, *The Logic of Significance and Context*, as a ‘companion’ volume to the even more voluminous work that eventually appeared under the full title *Exploring Meinong’s Jungle and Beyond: An investigation of noneism and the theory of items*. It was here in this work—a monumental piece of 1035 pages simply referred to as ‘The Jungle Book’ by many—that the Reference Theory was fully elaborated, analysed and criticized. It was also here that Routley propounded noneism and described in detail what he took to be an adequate philosophical approach to intensionality and nonexistence.²²

In typically idiosyncratic style Routley attempted what most others had long since given up—a rehabilitation of Meinong’s theory of objects, at least to the extent of developing a theory of objects that shared much in common with Meinong’s ‘but in a modern logical presentation’.

Meinong’s theory provides a coherent scheme for talking and reasoning about all items, not just those which exist, without the necessity for distorting or unworkable reductions; and in doing so it attributes ... features to nonentities—not merely to possibilities but also to impossibilities. It is these aspects, in particular, of Meinong’s theory which have given rise to severe criticism, especially from empiricists: it is claimed that nonentities, especially impossibilities, are hopelessly chaotic and disorderly, that their behaviour is offensive and their numbers excessive. For most philosophers, Meinong is a bogeyman, and Meinong’s theory of objects a treacherous, dangerous and overlush environment to be avoided at all philosophical costs. These are the attitudes which underlie remarks about ‘the horrors of Meinong’s jungle’ and many others in a similar vein For these sorts of bad philosophical reasons Meinong’s theory is generally regarded as thoroughly discredited ...²³

Routley himself, however, loved ‘the jungle’, both Meinong’s intellectual one which he explored in the Jungle Book and those naturally occurring ones which he explored by foot when he could. Called ‘rainforests’ by those who like them and ‘jungles’ by those who don’t, such ecosystems can be found scattered down the east coast of Australia and Routley loved them for their complexity, diversity and beauty. As well as exploring them and developing a subtle understanding of their ecology, he sought wherever possible to conserve them, and, in places, rehabilitate them.²⁴ So too with Meinong’s jungle.

22 Having left Princeton without completing his PhD, Routley later submitted *Exploring Meinong’s Jungle and Beyond* to the university for examination. It appears that markers there undertook to examine the first chapter (or part thereof) of the thousand page manuscript. They awarded a doctorate on that basis in June 1981.

23 Routley 1980, iv–v.

24 On the cover of the Jungle Book is a composite picture of Escher’s *Another World* superimposed on a photograph of rainforest (jungle) taken at Grady’s Creek Flora Reserve. The reserve, part of the Border Ranges, is on the north-western side of the ancient, rainforest-clad Mt Warning caldera, straddling the Queensland/New South Wales border on the east coast Australia, and contains some of the country’s finest remaining rainforest, including rare flora and fauna. At the time, it was also at the centre of a sustained campaign by Australian environmentalists trying to get substantial areas of the east coast rainforest protected in law. Routley’s concerns for this special area (expressed in the copyright page of the Jungle Book and shared by many environmentalists) arose from its then being designated for logging. As it turned out, the area was saved from logging and incorporated into the Border Ranges National Park in 1982, which was later given World Heritage listing as part of the Central Eastern Rainforest Reserves (Australia).

The work finally came off the printer's press in 1980 (as an 'in-house' non-profit production, being the third in a departmental monograph series—one of a number of series that he edited, see more below) but the material therein had been in preparation for a long time, with substantial parts being written while still at New England. The first published material on the logic and metaphysics of nonexistent objects, Routley (1966b), was submitted for publication in late 1964, within a year of his arrival there. As early as 1965 he began reading material at conferences and seminars. In early and mid 1965 he submitted another two papers on related matters for publication, Routley (1969) and (1970)—this latter paper describing his independently discovered method of supervaluations. The title essay, later incorporated in revised form into chapter one, had first existed as a 116 page typescript, 'Exploring Meinong's Jungle: Items and descriptions', completed in 1967—a paper to which he had made reference already in 1965. Renamed 'Exploring Meinong's Jungle I: Items and descriptions' and shortened to 55 pages, it was originally accepted for publication in the *Australasian Journal of Philosophy* but did not appear. By 1968 a second 69 page typescript had been produced, 'Exploring Meinong's Jungle II: Existence and identity when times change'. Both were accepted for publication in the *Notre Dame Journal of Formal Logic* in 1969 but, again, they did not appear. A revised version of this second essay was later incorporated into chapter two. Other published material was also incorporated—for example: an abridged version of Routley (1982) in chapter three; Routley and Routley (1973) in chapter four; Routley (1979a) in chapter six; Routley (1979b) in chapter seven; Routley and Routley (1979) in chapter eight; and Routley (1977) in the appendix.²⁵ This 'remixing' and rearranging of existing material was a common feature of his work.

Both the volume on significance and that on noneism had strong roots in the work of the New England Group. However, their gestation lasted far longer than the life of the group. Unfortunately it began dispersing after just three years, with Goddard's return to St Andrews to take up the chair of Logic and Metaphysics at the end of 1966. The Masters course was also relocated to the University of New South Wales at this time. Not long after, at the beginning of 1968, Routley moved on to Monash University, Melbourne. Though brief, the group's existence was instrumental in realising Goddard's aim of developing a serious teaching and research program in formal logic in Australia. Apart from the teaching and research already discussed (itself an incomplete account of the achievements of the group) another notable achievement in this regard was the 1965 formation of the Australasian Association for Logic (AAL) whose early fortunes were closely linked to the group. With the group's demise the AAL waned, to be resurrected again a few years later as collaboration between members of the group reintensified in Canberra in the early 1970s.

3. The Canberra group

In early 1968 Routley took up a senior research fellowship at Monash University, Melbourne. He continued work on significance, incompleteness, paradoxes and non-

25 Jack Smart is fond of saying that if one reads nothing else by Routley on Meinong and noneism, one should read Routley and Routley 1973. It was this, he said, that enabled him to finally understand Richard and Valerie Routley's views on Meinong.

classical logic, particularly relevant logics. The three years at Monash also saw the publication of nearly a dozen papers on modal logic. Some of these had been commenced earlier while at New England and many of them were the result of a fruitful collaboration with Hugh Montgomery of the University of Canterbury, New Zealand. They were working together as early as 1966, publishing Montgomery and Routley (1966), and continued collaborating until Montgomery's death in the late 1970's with eight joint publications.

After spending a couple of years at Monash, in 1971 Routley was appointed to a senior fellowship in Philosophy at the Australian National University—a position he held until his death. The position was taken up in the Research School of Social Sciences with Professor John Passmore. Both Passmore and his successor Jack Smart were supporters of the subsequent development of a research concentration in non-classical logic which became known as the Canberra Group (though Smart himself was committed to classical logic, being of a Quinean disposition). Routley was initially joined by former New England Group member Malcolm Rennie. In 1974, after having already published some dozen papers with Routley, Bob Meyer was also appointed to the department and Len Goddard returned to Australia spending leave at the ANU. He recalls that:

[i]n a very short time, the ANU Department under John Passmore became a major world centre in relevance logic. So much so that when I arrived there in 1974 for a two-year visit, I was greeted in the corridor by a plaintive Stanley Benn who groaned goodnaturedly as he said 'Not another bloody logician!' ... Poor Stanley must have felt that it was raining logicians and he had been caught without an umbrella. The rains continued for several years ...²⁶

Over the coming years the group continued to flourish, including amongst its number other former New England Group members like Valerie Plumwood and Ross Brady, students Errol Martin, Michael McRobbie and John Slaney, and others like Martin Bunder, Chris Mortensen and Graham Priest. The group also attracted visitors like Nuel Belnap, Michael Dunn, Newton da Costa and Alasdair Urquhart.

It was here, over the next decade or so, that Routley's continuing cooperative and intense research bore visible fruit with, amongst other things, the publication of three lengthy manuscripts which brought together much of what had gone before.²⁷ As already noted, the volume on significance logics was published in 1973. The volume to which it was a 'companion'—the *Jungle Book*—appeared later in 1980. The other volume that Routley described as a 'companion' to the *Jungle Book* was *Relevant Logics and Their Rivals I* [RLR], published in 1982. It was here, in conjunction with other members of the group (particularly Bob Meyer), that he pursued what he saw as the necessary logical revolution and it was with this publication and associated work in relevant logics that the Canberra Group made its mark.

The contemporary state of complacency with respect to the manifold deficiencies of classical logic and classical theories reflects, not only the usual (if deplorable)

26 Goddard 1992, 178. After a year spent back at St Andrews, in 1977 Goddard returned once again to Australia to the Boyce Gibson chair of philosophy at Melbourne University.

27 Goddard 1992, 179, notes that in the decade 1971–1980 the Canberra group put out 124 articles and five books on logic. By 1986 its output amounted to 175 articles, 16 monographs and seven books.

scientific process of entrenchment whereby once revolutionary young theories become, as they age, conservative members of the establishment, but also the fact that classical logic is not greatly subject to the testing process; for it has come to be taught in a way which largely insulates it from application in real and live argument. ... Only this sheltering from the application of classical theory to live reasoning could have made it possible for so many classical logicians to maintain so vigorously that a logic which allowed one to deduce any necessary proposition from any other, for example, thus laying waste the prime field for the use of reasoning—the a priori—is harmless, or even desirable, and to contend that alternative non-classical logics which avoid such results were not worth investigating, except as symbolic exercises.

... [Classical logic] has failed to live up to its early promise as a tool for clarifying and in some cases resolving philosophical and methodological issues.²⁸

Routley was firmly of the view that some relevant logics did live up to this promise and the publication of RLR was intended to help establish this.

The earliest material incorporated was work on *I* systems that Routley had begun in New England as early as 1966 (see Routley 1972, for more on this) and work from Val Routley (1967). By 1969 important semantical insights crucial to the overall project began to emerge. Working in Melbourne, he and Val completed a paper, 'The semantics of first degree entailment', which they read to the February 1969 Portsea Conference of the Melbourne De Morgan Society.²⁹ Therein they detailed a semantics for the first degree 'paradox-free' implication system *FD*. The first degree system described was common to a range of entailment systems including Anderson and Belnap's *E* and *R* and rejected such paradoxes as Disjunctive Syllogism ($A \& (\sim A \vee B) \rightarrow B$) and Ex Falso Quodlibet ($A \& \sim A \rightarrow B$). The crucial insight enabling their rejection was the use of what became known as the Routley star operator, $*$. It was by means of this that negation was defined in the now familiar way:

$\sim A$ is true in a set-up a iff A is false in a companion set-up a^* , the image of a under the one-one function $*$.

And so a two-valued semantics was described for *FD*, with negation now an intensional notion to be modelled in a manner similar to the increasingly popular 'worlds-semantics'. (Set-ups were developed as an ontologically neutral generalisation of the notion of possible worlds, taken to exhibit, what possible worlds do not, inconsistency and incompleteness.)

Late in the following year, 1970, Routley then circulated a draft outlining what he saw as a semantics for the system of entailment *R*, capable of defeating higher degree paradoxes. The semilattice semantics proposed were the same as those proposed at roughly the same time by Alasdair Urquhart. (It seems that Urquhart had developed his semantics during research for his Pittsburgh PhD thesis.) However, in addition to the semilattice semantics, Routley also made reference to a ternary relation *R* on set-ups and described the now familiar truth-condition for relevant implication ' $\rightarrow$ ':

²⁸ RLR, xi.

²⁹ A shortened version of this paper was subsequently published as Routley and Routley 1972.

$A \rightarrow B$ is true in a set-up a iff for all set-ups b, c in K , whenever $Rabc$ and A is true in b then B is true in c .

Here was the step, what Meyer has described as ‘the giant step’, which marked the beginning of a breakthrough in logical research providing, as it did, the means for a generalization of Kripke’s binary relation world-semantics for modal logics to ternary relation semantics for relevant systems.³⁰

This research also marked the beginning of a long and fruitful collaboration with Bob Meyer—a former student of Belnap and then working with Mike Dunn at Indiana University—with whom Routley worked for many years. Meyer had seen the draft and, after due consideration, had seen the possibility of a complete relational semantics for R . He began to develop the semantics, working with Routley. As Meyer later put it (replete with biblical import):

... [relevant] logics were looked upon with favor by many, for they captureth the intuitions, but by many more they were scorned, in that they hadeth no semantics. Word that Anderson & Belnap had made a logic without semantics leaked out. Some thought it wondrous and rejoiced, that the One True Logic should make its appearance among us in the Form of Pure Syntax, unencumbered by all that set-theoretic garbage. Others said that relevant logics were Mere Syntax. Surveying the situation Routley, and quite independently Urquhart, found an explication of the key concept of relevant implication.³¹

During 1971–1972 they wrote a series of papers in which ternary relation semantics was put to work alongside the Routley star operator and subsequently developed to provide semantics for a wide range of relevant logics. They began by polishing Routley’s ideas and in ‘The semantics of entailment’ (later referred to as ‘The semantics of entailment - I’) gave a detailed account of the semantics for R .

Building on [Richard and Val’s work on FD], and with a little help from our friends—Dunn and Urquhart in particular, with thanks also due to Anderson, Belnap, V. Routley, and Woodruff—we use[d] these insights to present a formal semantics for the system R of relevant implication ...³²

This was followed by ‘The semantics of entailment - II’ and ‘The semantics of entailment - III’ which both appeared in the first volume of the *Journal of Philosophical Logic* (see Routley and Meyer 1972a; 1972b) and where semantics were offered for NR and a range of positive systems of entailment.

30 The time was ‘right’ for such a breakthrough, as Routley later put it (RLR, 430). A little later Kit Fine also hit upon such a relational semantics.

31 Routley and Meyer 1973, 199.

32 Routley and Meyer 1973, 199–200. In light of Meyer’s recent recollections of the circumstances surrounding the discovery of these semantics for relevant logics it seems fitting that this paper was later published in Leblanc’s *Truth, Syntax and Modality*. This edited volume is the supplemented proceedings of the Temple University Conference on Alternative Semantics, held late December 1970. It was just prior to this Conference that Meyer received Routley’s draft describing his semilattice semantics and ternary relation R . It was also at this Conference that Urquhart told Dunn of his recently developed semilattice semantics, subsequently published as Urquhart 1972. And it was while Meyer and Dunn were trying to evaluate Urquhart’s semantics they ‘exhumed’ Routley’s closely similar paper and Meyer saw the potential of this worlds-semantics.

By early 1972, ‘The semantics of entailment—IV’ had been written and submitted for publication to *The Journal of Symbolic Logic*. This paper solved the problem of providing a semantics for Anderson and Belnap’s important system *E*. Though accepted, the required revisions were never undertaken and the paper was not published until 10 years later as Appendix 1 of RLR.³³ ‘The semantics of entailment—V’ was also drafted in 1972, finally being improved and incorporated into chapters four and five of RLR.

This important series of papers laid the foundations for a vibrant logic research program subsequently pursued by the Canberra group and within a couple of years Meyer was at the Australian National University with Routley where work continued. As noted earlier, RLR itself was finally published in 1982. In the meantime Routley pursued research with Meyer, publishing some 15 papers with him over the coming years.

Some of their joint work focussed on further consequences of their ground-breaking work in relevant semantics. In particular, their extension of two-valued (relational) world semantics to relevant logics raised an interesting question on which they dwelt: How far can two-valued world semantics be extended? Might every logic have a two-valued world semantics? Routley and Meyer (1976b) argued that this kind of semantic modelling, already extended from classical logic and its extensions to relevant logics, could be extended to all sentential logics—speculating that the result was extendable to all logics.

No one anywhere will design a sentential logic without a quite familiar kind of semantics, and no one can now scorn any such logic just because it lacks a semantics. For just as every sentential logic has a characteristic Lindenbaum algebra, so, and less trivially, every such logic has a bivalent relational ... semantics.³⁴

Just as the unary connective $\Box$ of modal logics can be modelled by means of a bivalent semantics supplemented with a binary relation *R*, and the binary connective $\rightarrow$ of relevant logics can be modelled by means of a bivalent semantics supplemented with a ternary relation *R*, any *n*-place connective of an arbitrary sentential logic can be modelled by means of a bivalent semantics supplemented with some *n* + 1-place relation.

Pre-empting later criticism targeted at the particular semantics they had developed for relevant logics, they subsequently noted that:

The fact that every sentential logic has a semantics does not show that semantics is pointless ... Semantical analyses remain the important foundations of full-blown accounts of meaning; and they provide easy keys to a great many logical doors. Not surprisingly [however] the uniform semantics provided by [the method outlined in Routley and Meyer (1976b)] often does not supply anything like the best or most illuminating semantics for a system ... [It] leads ... to a more general model theory than that currently propounded ...³⁵

³³ The delay seems to have been due to Routley.

³⁴ Routley and Meyer 1976b, 345.

³⁵ Routley and Meyer 1976b, 346–347.

In a follow-up paper, Meyer and Routley (1977), they went on to claim that the result extended beyond logics to arbitrary theories. Every theory can be given a bivalent, Kripke-style semantics.³⁶ Again, the philosophical consequences of such an extension result were seen as significant. Semantics, once provided, is often taken to render theories intelligible. Logics, in particular, are often supposed to be rendered intelligible by the provision of such a semantics. Often but not always. To think that intelligibility is thus conferred is to subscribe to what Meyer and Routley refer to as ‘the thesis of extensional reduction—‘roughly, the thesis that everything that is intelligible can be made intelligible in the context furnished by classical, extensional logic’.³⁷ Their result that every theory can be given an appropriate extensional semantics, they suggest:

[does] not vindicate, but rather trivialise/s, extensional, possible-world analyses of arbitrary theories. In short, we are reducing the notion of extensional reduction itself to absurdity. The correct conclusion ... is that this notion is a pig-in-the-poke, which has nothing to do with being intelligible save in the context of narrow technical programs ... [which] rest on a naive philosophical empiricism that is by now discredited even among empiricists, but which remains acceptable when it is all dolled up in fancy formal clothes and presented as the logical common sense of the up-to-date philosophical community.³⁸

The fact then that they were able to provide extensional semantics for relevant logics comes replete with a cautionary tale. While the provision of such semantics enabled relevantists to preach to the heathens in their own tongue (as Meyer once put it), while the relevantist may be required in the circumstances to make do with the means afforded them by the dominant logical paradigm;

the historical accident that classical logic is the logic we have all been taught, and in which we feel most at home, is to be taken accordingly as sheer historical accident ... and which is not to be taken as a criterion of semantic Intelligibility for all Future Time.³⁹

This work on general semantics is closely connected with other work by Routley and Rennie on general semantics. In the early 1970s Rennie had been working on the semantics of natural language (along with others like Cresswell, Tichy, Montague, and Lewis) and in Rennie (1974) he proposed a general theory of its semantics using a typed lambda calculus—with the deep structure of natural language being displayed in the formalism of the lambda calculus which is then used to model natural language. Under Rennie’s influence Routley considered the issue and, in Routley (1975), he proposed a ‘universal semantics’ for natural language by way of an untyped, free lambda calculus (the shift to a free calculus avoiding what he referred to as ‘the fundamental acidity problem’ that dogged Rennie). His proposed semantics was exactly the extensional, two-valued world semantics advocated by

36 The necessary technical results were described in ‘Extensional reduction II’. The paper, Meyer and Routley 1976, is scheduled to finally appear in *Relevant Logics and Their Rivals II*—a forthcoming sequel to RLR.

37 Meyer and Routley 1977, p. 357.

38 Meyer and Routley 1977, 356.

39 Meyer and Routley 1977, 356.

Routley and Meyer (1976b) for sentential logics and analyzed by Meyer and Routley (1977), now extended universally. The significance of such a universal semantics then is tempered by the limits that Routley saw as applicable to all such extensional reduction.

In 1974 the first and only international conference on relevant logics was held at St Louis, Missouri. It was attended by, amongst others, Nuel Belnap, William Parry, Alasdair Urquhart, Kit Fine, Michael Dunn and, of course, Meyer and Routley.⁴⁰ A typescript was prepared by the conference organisers—*In Memoriam: Alan Ross Anderson. Proceedings of the International Conference on Relevant Logic*—but due to costs and lack of interest from publishers it languished for many years. In 1981 Routley took over the task of trying to get the typescript updated, cleaned up and published. It was slow work but finally, in 1989, *Directions in Relevant Logic* appeared, by which time Routley had changed his name to Sylvan. (See Norman and Sylvan 1989, for publication details.) The volume presents a range of views, both for and against the use of relevant logics, ‘extending the frontiers of the relevant logical enterprise’ and contains both an Introduction and Conclusion by Sylvan, briefly surveying the field and presenting outstanding problems and future directions. (It also contains two papers by Routley, both written between 1973 and 1976, Routley 1989a; 1989b.)

In preparing it for publication Sylvan had written a lot of new material by way of survey and historical introduction; too much, as it turned out, to include. He decided to gather the surplus material together and publish it in-house in his Research Series in Logic and Metaphysics. It appeared in the same year as *Directions in Relevant Logic*, bearing the title *Bystanders’ Guide to Sociative Logics*. The shift in nomenclature from ‘relevant’ to ‘sociative’ reflected a broadening of logical horizons in Sylvan’s work. Already in RLR he had thought the terms ‘relevance’ and ‘relevant’ were somewhat misleading.

We want it to emerge with stark clarity ... that our main concern is not really relevance at all—the appropriate sort of relevance is a by-product of any good implication relation, which comes out in the wash. Only one weak necessary condition for relevance features in what follows [the variable sharing requirement, WR, described in §1.1 of RLR]: that is all. A study of relevance, of the sorts of relevance, of sufficient conditions for relevance, ...—all these matters are philosophically interesting, and some of them are important, especially for the logics of evidence and probability—but they are not our present concern. For this reason the name ‘relevant logics’ or ‘relevance logic’, is not entirely satisfactory—perhaps even, to lodge a much stronger claim, unfortunate—since the name tends to suggest, wrongly, that relevance is of the essence, instead of being a peripheral concern. Nonetheless the name has a point, and it is a little late to change it.

What our concern is with is implication and its varieties, and in particular with genuine implication in the sense that amounts to total sufficiency. Thus our concern is, in the first place, with sufficiency, or, as it is otherwise equivalently put in the logical case, with complete logical dependence, with total inclusion of content, and so on.⁴¹

40 Anderson, sadly, had died in 1973 while still in his forties.

41 RLR, x.

Now, several years later, a broadening of historical perspective only confirmed this view. Not only were the late twentieth-century systems of relevance logics of the Pittsburgh group (e.g. *E* and *R*) and the broader class of relevant logics studied by the Canberra group (including Sylvan's preferred systems of deep relevant logic, the *D* systems of RLR) unfortunately named, they were also merely a part of what now seemed a much broader class of logics—'broadly relevant' or 'sociative' logics, as Sylvan called them.

In a sociative logic, premises and conclusion of an argument, or correspondingly antecedents and consequent of a valid implication, are associated; they characteristically have enough to do with one another. To that extent any such logic is broadly relevant. But what have become known as relevant logics, the best known of which are the relevance logics largely forged in dirty Pittsburgh, comprise only a quite proper subclass of the broader class of sociative logics, many kinds of which have a much longer and more substantial history than relevant logics. If the story elaborated in this guide is correct early sociative logics did not arise in reaction to noxious irrelevant products, these logics were the original logics. The oversimplification and excessive power of irrelevant systematisation only came later; and then especially in the later middle ages and contemporary times when such systematisation came to dominate, there was a due, though substantially ineffectual, reaction against it.

What the later sociative logics that developed in reaction have in common is primarily the aim to avoid the most obvious paradoxes of dominant logical theorising. The plurality of logical theories and sketches that now make up sociative logics share little else however.⁴²

The story given in the guide includes a lengthy 70 page essay, 'A Preliminary Western History of Sociative Logics', where the case is made for the historical primacy of sociative logics. (Aristotelian syllogistic theory is, of course, a fine example of a sociative logic requiring, as it does, term-sharing between antecedents and consequent of valid implications.) It also includes an essay surveying and classifying the various sociative logics. Both have subsequently been incorporated into a third volume on such logics in addition to *Relevant Logics and Their Rivals*, and *Directions in Relevant Logic*—namely, *Sociative Logics and Their Applications* (see Sylvan 2000, for publication details) but more on this below.

In the same year that *Directions in Relevant Logic* was published, the long-awaited, extensive edited collection of essays, *Paraconsistent Logic*, also appeared (see Priest *et al.* 1989, for publication details). In addition to work with Meyer and others on relevant logics capable of disarming, amongst other things, the paradoxes of implication that beset contemporary classically oriented systems, work had also continued on the logical and semantic paradoxes. Routley's early work concentrated on approaches to these paradoxes by way of incompleteness and truth-value gaps. As time went on, however, he became increasingly convinced that a proper treatment ought to proceed by way of inconsistency with appropriate relevant logics, already employed elsewhere, as the means for handling such problems. But the roots of such a paraconsistent approach did not lie in the

⁴² Sylvan 1989, ii.

resolution of these paradoxes. They lay further back in time.

A key aspect of Meinong's theory of objects was his theory of impossible objects. Routley's defence of this theory (or, at least, a variation thereof) revealed his commitment to impossibilia.

Perhaps the most distinctive feature of Meinong's theory is that objects are not restricted ... to possible objects, but are taken to embrace impossible objects, and these impossibilia also are allowed a full role as proper subjects ... This seems to be the feature of Meinong's theory which has caused most consternation. ... [However] there is ... a straight-forward case for not arbitrarily stopping at possibility.⁴³

So there was a need for a logic capable of handling such impossibilia, amongst other things. The relevant logics he had been working on, with their associated semantics, were suitably paraconsistent. Both his work in Meinongian metaphysics and his work in the semantics of relevant logics drew him inexorably on.

Paraconsistency, the non-triviality of inconsistent theories, was one thing. That the world itself was inconsistent, was quite another however, and for a time Routley remained cautious on the matter. Routley and Meyer (1976a), pursuing the use of relevant logics as a formalisation of (static) dialectical logic, argued for the adequacy of system *DM* and went on to begin an engagement with the question of the consistency of the world. As he later put it:

[Relevant paraconsistent logics] leave it open whether the actual world *T* (of the semantical theory) is consistent or not. The thought soon occurs to anyone who has struggled with the paradoxes, especially such apparently true contradictions as those the logico-semantical paradoxes yield, that perhaps the world is not consistent.⁴⁴

At the time of this metaphysical engagement, 1973–1974 by his own reckoning, Routley's position was one of 'agnosticism', making the claim that 'the question of the consistency of the world cannot be conclusively resolved'.⁴⁵ Within a few years he bit the bullet few have the nerve to bite. In 1976 he went 'dialectical'—that is to say, he came to the view that the world itself was inconsistent.

In that year Routley took up a visiting professorship in mathematics at the State University of Campinas, Brazil—home to paraconsistentists like Ayda Arruda and Elias Alves, and Andréa Loparić with whom Routley was then working, and close to his 'constant but always cordial critic' Newton da Costa in Sao Paulo (with whom he had been working since 1969). While there he read a draft of his 'Ultralogic as universal?', which revealed just how non-classical he had become. (See Routley 1977, for publication details.)

Even without the paradoxes of implication the apparent problem of isolated antinomies of course remains—unless a dialectical position is embraced, and such contradictions are just accepted as part of the theory. Such a dialectical

43 Routley and Routley 1973, 230. The theory is further defended in Routley 1976.

44 Routley 1980, 294.

45 Routley and Meyer 1976a, 20. Routley himself described his position at this time as agnostic; see Routley 1979c, 328, footnote 1.

position does however become a live option for anyone charmed by the semantical analysis of relevant logics and of ultramodal functors. ... And then several reasons for giving serious consideration to this ordinarily-reckoned crazy option begin to emerge, not least of them the arguments for such antinomies as the semantical paradoxes and the appeal of the ideal of a uniform ultramodal solution of all philosophical paradoxes. ... A dialectical diagnosis enables one to offer such a uniform and unified account in a particularly simple way.⁴⁶

So too with set theory, Routley advocated:

the thorough-going dialectical position, according to which unreconstituted set theory is an inconsistent but nonetheless true theory. The dialectical position is ... that there is nothing wrong with the original unformalised Cantorian theory: disaster only occurred with formalisation of the theory which underpinned it with classical logic ...

Cantor's paradise was thus regained but he had now taken a direction in which most of his fellow relevantists were unwilling to follow.

The relevant program can take many alternative routes to its foundational goal, and that I have chosen is only one, and perhaps an idiosyncratic one.⁴⁷

In the same year he drafted 'Dialectical logic, semantics and metamathematics', Routley (1979c).

[By giving up the classical faith] one is free to return to some-thing like the grand simplicity of naive set theory, to semantically closed natural languages (having abandoned the towering but ill-constucted and mostly unfinished hierarchies of formal languages), and to intuitive accounts of truth, of proof, and of many other intensional notions ... [W]e should arrive back guided by a dialectical theory which reassembles the intuitive data and sets it in a new light.⁴⁸

These papers represent a shift to what is now termed a 'dialethic' position, a term devised later by Routley and Graham Priest to capture the radical paraconsistent thesis that the world itself is inconsistent though non-trivial.

The shift occurred after meeting Priest soon after his arrival in Australia from the University of St Andrews. He arrived in 1976, appointed to the University of Western Australia, and found Routley teetering on the edge of dialetheism. Their meeting seemed to push him over. Priest had been working on paraconsistent logics before coming to Australia, writing 'The logic of paradox' prior to his arrival. (See Priest 1979, for publication details). He attended the 1976 AAL Conference and read this paper to an audience that included Routley, and collaboration began. By 1978 they were working together to produce a collection of essays on paraconsistency. Their collaboration involved their writing a number of essays intended for those outside the narrow band of working paraconsistentists. They drafted five essays which, like

⁴⁶ 'Ultralogic as universal?' in Routley 1980, 906.

⁴⁷ Routley 1980, footnote on 893.

⁴⁸ Routley 1979c, 302.

later material in *Bystanders' Guide to Sociative Logics*, included historical survey material and taxonomic material, and which was partially overlapped by that of *Bystanders' Guide*. (This was not surprising since the logics in question in *Bystanders' Guide* were relevant paraconsistent logics.) They also drafted essays on dialectic, applications of paraconsistent logic and philosophical arguments for and ramifications of what they saw as the necessary paraconsistent turn. Therein they maintained the need for a paraconsistent treatment of, among other things: Meinongian impossibilia; inconsistent theories like naive semantics, naive set theory, quantum mechanics, and the infinitesimal calculus; moral dilemmas; belief systems; data processing; and vagueness. The net was widely cast, the applications many.

With delays in publication, they decided to release these essays as a cheap introduction to the subject that might promote discussion and criticism of the views expressed therein. Published in-house under the title *On Paraconsistency*, the essays first appeared in 1983—some six years before their eventual full publication in *Paraconsistent Logic*—in the Research Papers in Logic series. (A second edition was subsequently produced in 1984 in the Research Series in Logic and Metaphysics.)

At about this time Priest and Routley were also involved in the editing of a collection of papers on paraconsistency for *Studia Logica*. Just as Belnap had edited a special issue of *Studia Logica* on the topic of relevant logics in 1979 (to which Routley contributed his 1979d, with further contributions from Belnap, Dunn and Urquhart, amongst others), in 1984 Priest and Routley did the same on the topic of paraconsistent logics. Both contributed papers in addition to a jointly authored introduction (see Priest and Routley 1984; Priest 1984; Routley 1984), as did other members of the Canberra group including Brady, Bunder, Mortensen and Slaney.

With all that was going on related to work in logic and metaphysics alone it must, indeed, have been a busy time for Routley and his research assistant Jean Norman.

Though completed in 1982 it was not until 1989 that *Paraconsistent Logic* itself finally appeared, all 716 pages of it, with a comprehensive bibliography on paraconsistency and essays by nineteen of the leading workers in the field of paraconsistency (eight of whom were Australian logicians, all associated with the Canberra group). In addition to the above-mentioned essays jointly authored by Priest and Routley, the volume included an essay by Brady and Routley on dialectical set theory, Brady and Routley (1989), and reprinted another by Routley and Plumwood on paraconsistent deontic logic, Routley and Plumwood (1983).

4. A comprehensive philosophy

While working on relevant logics and their semantics, paraconsistency, noneism and item theory⁴⁹ (as well as writings in environmental philosophy, ethics, political philosophy, epistemology and other areas in which Sylvan worked, beyond the scope of this essay), Sylvan had also been thinking about realism and associated metaphysical positions.

By the 1980s it had become difficult, in philosophy, to escape the fashionable issue

49 In characteristic fashion Sylvan devised the term 'sistology' to describe this generalisation of ontology—the item theory liberalization of standard meaner ontology'. See Sylvan 1991, for details.

of realism and its main rivals, anti-realism and relativism. I soon realised that I could not (for object-theoretic reasons) be satisfied with any of the stock options, and so I began investigation of a radical pluralism, which in due course deepened into deep pluralism [sic].⁵⁰

Reiterating themes from the *Jungle Book*, Plumwood and Routley (1982) urged a return to consideration of choice between large, overarching philosophical frameworks previously closed off by what they had long argued was the limiting nature of dominating classical logic. In fact the choice should preclude empiricism and its core commitment that ‘the world can be adequately explained ... and truth [more generally] can be accounted for just in terms of what exists’ and it should also reject the closely connected idea that explanation and understanding can be carried out in purely extensional terms.⁵¹ Moreover, again emphasising a central theme of the *Jungle Book*, they argued for the need to postulate a plurality of worlds beyond the real and actual, within a noneist framework, to enable proper explanation and understanding of the actual world.

It was not long, however, before the assumed uniqueness of the actual world was itself rejected. In 1983, Sylvan read a paper to the second paraconsistency conference at the Australian National University, Sylvan (1984), where he argued for a kind of metaphysical pluralism both with regard to truth and the actual world. Avowedly in the spirit of Arne Naess, Hector-Neri Castañeda and Newton da Costa he proposed that all ‘admissible’ theories (roughly, those not exhibiting ‘excessive anomalies’) are true pluralistically; a number of apparently competing, and certainly mutually inconsistent, theories have this status. For example, Russell’s theory of descriptions, Frege’s theory and Strawson’s are all true pluralistically. What held for theories was also true of the world; attempts to maintain a theory/world distinction able to rescue the uniqueness of the world were based on a ‘delusion’, he thought.⁵²

His developing pluralistic view was, further developed in Sylvan (1988) where, once again, he emphasised the radical nature of the pluralism being advocated.

Pluralism ... comes in two distinct forms: a theory or meta-pluralism, according to which there are many correct theories (especially larger philosophical positions) but at most one actual world; and radical or deep pluralism which goes to the root of these differences in correctness, to be found in things, and discerns a plurality of actual worlds as well as of theories.⁵³

This was contrasted with realism which claims not only that an actual world exists but that it is unique. Sylvan, adopting a radical pluralism, accordingly rejected realism (a theme elaborated on at some length in the context of Australian philosophy in Sylvan 1987) and, along the way, also discounted anti-realism and relativism.

From the outset he also maintained the need to distinguish his adopted position from those less able to discriminate between rival theories and worlds like relativism and perspectivism. Worlds could be ranked. Preferences could be argued

50 From his 1994 Summary Statement in support of application for promotion to Professor, in his *Papers 195x–1996*.

51 Plumwood and Routley 1982, p. 51.

52 See Sylvan 1984, 37–38.

53 Sylvan 1988, 253.

for. Among these preferences were those pertaining to the species of pluralism itself. Sylvan (1988) advanced what he termed ‘sistological pluralism’,⁵⁴ a species of radical pluralism based on a liberal theory of objects, namely noneism. It was, he maintained, simply an enriched commonsense.⁵⁵

At this time, if not before, he was quite explicit about the integrated and systematic nature of the philosophical enterprise he was now engaged in. He saw himself as:

... trying to put together a systematic and comprehensive deep theory, including among other parts, deep green theory and its practice, deep pluralism and its regional applications, deep relevant logic and its dialectical elaborations, all set within integrated object and process theory [deep item theory].⁵⁶

The relation between the various parts of his ‘deep theory’ was as follows: the work on deep pluralism was made possible, he argued, by the technological advances in logic he had long laboured to bring about, in particular the adoption of his preferred deep relevant logic;⁵⁷ it was couched within deep item-theory, thereby, he claimed, avoiding damaging ontological excesses;⁵⁸ and it provided a sound metaphysical basis for ethics, properly understood, namely deep-green theory.⁵⁹

Sustained work in the late 1980s and early 1990s resulted in a lengthy draft manuscript on pluralism, primarily metaphysical though subsuming a kind of logical pluralism and much else besides. In an attempt to dissociate his preferred type of pluralism from other decidedly unsatisfactory and impoverished pluralisms he simply resorted to a novel spelling (a technique he employed elsewhere). Pluralism-in-the-intended-sense would henceforth be referred to as plurallism. Moreover, by the time the manuscript neared completion he found a need to distinguish what he had formerly been prepared to run together, radical and deep pluralism. He now pointed to a key distinction between them. While both postulate a plurality of actual worlds (and thus count as ‘full pluralism’, as opposed to shallow ‘theoretical pluralism’), deep pluralism goes beyond radical in postulating a further single object, ‘an ideal completing object, pulling together and reuniting the multiplicity of actual worlds’ of radical pluralism. Thus he arrived at deep plurallism.

Deep plurallism is deep not only in its own right, as already indicated, but through its associations, through a confluence of depth. It fits neatly into deep theory, a coming together of a group of theories which independently acquired some measures of depth or a deepness title. Foremost among these are deep-green theory ... and deep relevant logic.⁶⁰

54 Cf. footnote 49.

55 Sylvan was a strong supporter of commonsense, ‘properly refined’, and of commonsense philosophy and saw the commonsensicality of his philosophical views as a major virtue, even if they flew in the face of received philosophical dogma. He saw his theory of items as arising from commonsense; was a strong defender of Reid and, at times, the later Wittgenstein; saw the uncorrupted, commonsense logical intuitions of the untutored undergraduate as the basic data to which a logical theory ought answer; and so on. (See, for example, chapter six of the *Jungle Book*.)

56 Nola 1988, ‘Notes on contributors: Richard Sylvan’, 295.

57 Cf. Sylvan 1997a, chapter 7.

58 Cf. Sylvan 1997a, 11–12.

59 Cf. Sylvan 1997a, xxviii.

60 Sylvan 1997a, 13.

The further determining factor was the need to ‘incorporate and assume [deep] item-theory’. Sistological plurallism was the final result. By early 1994 he began preparing the completed manuscript on the topic for publication with an established publishing house, White Horse Press, under the title *Deep Plurallism*.⁶¹ It was another two years before the text was ready to go to the publishers and even then some minor bibliographic work remained. Sadly, by this stage, he was no longer alive and the final revisions required for publication were completed by his former student, friend and colleague—Nick Griffin. The manuscript (again, long at over 500 pages) was finally published in 1997 under the title *Transcendental Metaphysics: From radical to deep plurallism*.

Not only was the work itself part of a comprehensive philosophical theory—deep theory—it was also seen as a necessary prelude to even more ambitious themes. Sylvan had long been of the view that contemporary social, political and environmental ills were, to a significant extent, a consequence of faulty philosophical foundations, in particular, faulty metaphysical foundations. An essential ingredient of the remedy would therefore involve a manifest reconnection of social and political theory with metaphysics (and the logical theory it presupposes), and a subsequent revision of the revealed foundations.⁶² *Transcendental Metaphysics* was, in part, just such a revision.

[The] government should not be too pleased with this book. One of the underlying aims of this text is frankly subversive. Is it to demonstrate from within that main theoretical and intellectual practices are defective . . . that the main establishment game is rationally flawed and intellectually not worth the chimerical candle, and that therefore main educational and other practices are defective. Thereupon very much established practice should change. . . . It is intended, among other things, as a metaphysical prelude to theoretical anarchism.⁶³

He was under no illusions that the revised metaphysics would ‘usher in any new socio-political vision, still less fix new [sought for] arrangements’ but he did, nonetheless, see himself as completing an essential task—namely, providing a sound intellectual foundation thereby enhancing the prospects for a world he thought would be much improved.

And there was yet another aspect to the work. As mentioned earlier, he saw deep plurallism as having ‘regional applications’. He saw it as providing the necessary intellectual foundations for regionalism, regional variation being a significant source of plurality. Regionalism was a recurring theme through much of his later philosophy. In 1983, the same year as his initial advocacy of a radical pluralism, he presented a paper to the Australasian Association of Philosophy Conference on the topic of regional philosophies in Australasia. (The paper was subsequently published as Sylvan 1985.) Arguing against what he saw as the unreasonable

61 With local university printeries shut down by economically minded bureaucrats and fed up with criticism of his unorthodox printing practices, he had already resorted to official academic presses for the distribution of his jointly authored work in environmental philosophy with co-worker David Bennett, *The Greening of Ethics*.

62 This is clearly displayed in ‘Social theories, self management and environmental problems’, jointly authored with Val Routley (see Routley, V. and Routley, R. 1980 for full publication details). This lengthy paper (115 pages in all!) is an amazing display of the perceived reach and relevance of philosophy. See especially 239ff.

63 Sylvan 1997a, xiii.

dominance of philosophy in Australasia by influences from Europe and North America, resulting in a kind of intellectual colonialism, he suggested that philosophy was not essentially cosmopolitan, that 'we do our own things', that there is a significant and relevant cultural difference. Given this regional outlook, a case can then be made to differentiate Australian philosophers from their northern contemporaries and this difference can reasonably underwrite a policy of discrimination in favour of locals.

The theme of a national, Australasian philosophy was not a new one. It had been raised 60 years earlier in the inaugural 1923 issue of *The Australasian Journal of Psychology and Philosophy* by the then editor Francis Anderson. Anderson's views on the matter were largely negative. So too were some respondents to Sylvan's views, for example, Robert Brown of the History of Ideas Unit at The Australian National University.⁶⁴ John Passmore was more ambivalent, 'partly agreeing with Sylvan' but ultimately 'in a form much too compromising to satisfy his exigent demands'.⁶⁵ Sylvan remained unmoved, claiming both a distinctively Australian movement in logic and environmental philosophy. (A response can be found in Sylvan 1992, 13–17.)

Though not monolithic, philosophy was nonetheless able to progress according to Sylvan, and he viewed his and others' work in this light. The progress might, of course, be regionally specific, but it was none the worse for that. For example, he saw the regional development of new and sophisticated logical techniques as instrumental in progress in the local philosophical outlook.

... as [nonclassical] reasoning technologies are investigated and shown to be viable, the whole issue of the broad alternatives, of choice among great frameworks, is being reopened again. But not just in the old form. These choices are being thrown back up again in a much sharper and more precise form, one that makes the range of alternative positions much clearer, and one that will perhaps enable a rather more definitive resolution of some of the questions that have vexed philosophy for more than 2000 years.⁶⁶

More definitively, he later noted a 'scepticism ... about the idea of perennial problems'.

For the problems depend on assumptions, received methodological and proof procedures, and are altered with these. ... [T]he logical apparatus is now available to make significant advances on some of these problems ... not just to dither around in older narrowly analytic ways, leaving problems and their assumption bases intact.⁶⁷

Like Wittgenstein, he thought that many philosophical problems were pseudo-problems which arise as a result of a particular philosophical approach taken. The mind-body problem, scepticism and the so-called problem of universals were just three examples.

⁶⁴ See Brown 1992.

⁶⁵ Passmore 1992, 16.

⁶⁶ Plumwood and Routley 1982, 50–51.

⁶⁷ Sylvan 1992, 22–23.

5. Unfinished seams

Needless to say, when he died he left a number of philosophical problems unresolved. However, he also left behind a lot of unfinished work in which a number of these problems were tackled. He was an ambitious philosopher.

As already noted, at the time of his death *Transcendental Metaphysics* was in the final stages of preparation for publication—a job completed the following year by Nick Griffin. He had also commenced work on a manuscript which displayed the problem-solving capacities of the new logics he and others had helped develop. Originally titled *Relapse* in recognition of its aim of displaying the applications of (broadly) relevant logics, the text aimed to survey their variety and apply them to problems primarily in the philosophy of science (thus returning to a project which he had originally begun as a graduate student in Princeton). The project was picked up by Graham Priest and myself and eventually resulted in the 2000 publication *Sociative Logics and Their Applications*. (See Sylvan 2000, for full publication details.⁶⁸) It was the third in a series on relevant logics. The first, *Relevant Logics and Their Rivals I*, described the extant theory; the second, *Directions in Relevant Logic*, looked to the future; this third volume applied the theory. There is soon to be a fourth, the long awaited *Relevant Logics and Their Rivals II*, a volume long promised by Sylvan though never completed. It is currently being completed under the guidance of Ross Brady.

Two further books were planned. One aimed to deal with problems in epistemology and cognitive science, an area desperately in need of some sensible theorising, in Sylvan's view. A substantial amount of material was left in rough, draft form and is currently being prepared for publication by Nick Griffin under the original title *Ventures in Epistemology*. Sylvan had also begun work with Seiki Akama on a volume applying sociative logics to issues in computation theory and artificial intelligence. He had already produced some work in this area with Jack Copeland—see chapter eight of Sylvan 2000; Copeland and Sylvan 1999. It seems, however, that the project was at too early a stage to enable its subsequent completion.

He also left unfinished material for an improved treatment of items, deep item-theory, drafted between 1988 and 1995. In introductory material he noted that item theory:

... has moved on, beyond that of [the Jungle Book]. In particular, [the Jungle Book], an interim production in any case, was insufficiently pluralistic, and in some respects not comprehensive or liberal enough. Nonetheless, [it] remains as a solid background. [It] is not superseded, rather expanded. All the negative theory, criticism stands—at least almost all of it does. In particular, the critique of the reference theory stands: it is fundamental.

Item theory was to be plurallised and extended to include:

several further types of nonexistent items including set-like objects and mental items and making further applications in phenomenology and cognitive science.⁶⁹

This project too, will remain unfinished it seems.

68 A very nice, concise introduction to relevant conditional theory and its applications can also be found in Sylvan 1997b.

69 'Guide—item theory', in *Papers 195x–1996*.

As is evident by now, Sylvan lit philosophical fires in many places and was keen to fan others, hoping to clear away congested undergrowth and rejuvenate the intellectual terrain. In the aftermath of his philosophical outpouring there are now intellectual spot-fires burning in a number of places, as fruitful projects are pursued or new fields are explored by coworkers, students, and others. Since he is now non-existent, discussion and collaboration with him have ceased (such is the logic of the relation of collaboration); however, as he himself would have testified, his failure to exist will not stop him from continuing to make a contribution to philosophy.

6. In-house publication series

General disillusionment with academic publishing and dismay at the excessive profiteering of the major commercial publishing houses led Sylvan to publish a large amount of material 'in-house', i.e. through printing presses within the Australian National University itself, by-passing what he saw as the unnecessary expense of the establishment presses. To accommodate these publications and to assist others to make their ideas available in a similar manner, he edited and produced a number of series which were distributed from the Department of Philosophy, Research School of Social Sciences. Sadly, upon his death the practice was discontinued and, a couple of years later, the remaining back-copies were disposed of.

The series produced included:

- Department of Philosophy Monograph Series
1974–1980. Numbers 1–4.
- Research Papers in Logic (Yellow Series)
1978–1985. Numbers 1–23.
Known locally as 'The Yellow Peril Series'.
- Research Series in Logic and Metaphysics
1984–1990. Numbers 1–6.
- Research Series in Unfashionable Philosophy
1984–1990. Numbers 1–4.
- Discussion Papers in Environmental Philosophy (Green Series)
1982–1994. Numbers 1–20.

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