Whitehead revealed

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Alfred North Whitehead: The Man and His Work, Vol. I 1861-1910. By Victor Lowe. Johns Hopkins University Press: 1985. Pp.351. \$27.50, £26.40.

Science and the Modern World. By Alfred North Whitehead. Introduction by Robert M. Young. Free Association Books, 26 Freegrove Road, London N7 9RQ, UK: 1985. Pp.265. Hbk £11.95; pbk £4.95.

Some works become classics of their type. Such would seem to be the destiny of the first volume of Victor Lowe's superb Alfred North Whitehead: The Man and His Work. Certainly, Whitehead deserves a biography. His work as a mathematician, and as partner to Bertrand Russell in creating that original of modern mathematical logic, Principia Mathematica, is justification enough. But when one adds to this Whitehead's later achievements following his call in 1924 to a chair in the philosophy department of Harvard University, a biography is not just warranted, it is demanded.

Unfortunately, Whitehead himself desired that no such account of his life should be given. He systematically destroyed, or had destroyed, nearly all written traces of his personal life, including letters to and from his wife and family. Moreover, he kept no journal, believing his personal life was not a fitting subject for such a record. Finally, unlike the typical scholar, he had destroyed all of his unpublished manuscripts, drafts and various manuscript editions of his published works. Thus, he reasoned, there would be no Nachlass for vounger scholars to waste their time searching in attempts to chronicle his intellectual development. Lowe puts all of this down to Whitehead's personal reserve: "He held an almost fanatical belief in the right to privacy, and thought that the only subject of rightful public interest in him was the work he had published" (p. 7).

Given this state of affairs, it is clear that Lowe had his work cut out. Yet his 20year-long struggle to tease out information from impoverished sources has been well worthwhile. All of the essential ingredients of successful biography are here. Whitehead's childhood, days at school, time at Cambridge as student and fellow, marriage to Evelyn Wade in 1890, and, finally, his relationship with Russell (first as teacher, then as colleague in the founding of symbolic logic and foundations of mathematics) are each carefully laid out in all the detail that could possibly be given. Even when details are missing, and Lowe must make an inference to fill in the gap, he advises us, often most diffidently, of the fact, and then goes on with no hesitation to reach a conclusion as required.

One of the more delicate of these situations concerns the beginning phases of the cooperation with Russell in 1900. Russell was apparently deeply smitten with Evelyn, and went so far as to surreptitiously support the Whitehead family to the tune of a large sum of money. Was Russell's love ever consummated? Precise details of course are lacking, yet the salient question refuses to go away. Here Lowe marshalls his evidence, warns us, and makes the inference to an answer (p.248).

One major difficulty in understanding Whitehead, especially for Americans, is lack of familiarity with the English middle-class educational culture during late Victorian times. Lowe does a fine job in laying out the entire context of public schools and Oxbridge as they existed during Whitehead's era. Indeed, whether or not interest in Whitehead alone could carry this book, Lowe's account of the educational experience would deserve our attention.

Some interesting biographical points come to light. For example, Whitehead was a supreme team player, especially at rugby. His school's journal, the Shirburnian Magazine, called him "the best forward the School has ever had" (p.56). Lowe finds the roots of some of Whitehead's later philosophical attitudes in these experiences on the playing field. Another rich account involves the Cambridge Conversazione Society, that select, secret discussion group more commonly known as "the Apostles". Lowe provides us with a full chapter on this subject, probably about as much as could be asked for regarding a secret society! Several roots of Whitehead's later philosophy are to be found in his Apostolic comradeship: years spent in intense discussion with the ebullient McTaggert certainly are sufficient to account for Whitehead's later affection for idealism of the Hegelian systematic

Other Apostolic tenets perhaps account for one of the severest problems that interpreters of Whitehead must face, namely, attempting to make consistent the thinking of Whitehead the English mathematician with Whitehead the American philosopher. Lowe himself eschews the project. During his exquisitely detailed analysis of the cooperative writing of *Principia*, he cautions us so:

But I shall not here make comparisons with the views to be found in what he published after he came to Harvard in 1924 as Professor of Philosophy, and must warn philosophers whose primary knowledge is of the later work that this is a very risky business [p.276].

Risky indeed, since in many ways the earlier Whitehead is manifestly inconsistent with the later. A possible explanation for this lies in the tradition of absolute candour imposed by the Apostles upon

themselves. As Sidgewick, a fellow Apostle, has noted, "No consistency was demanded with opinions previously held—truth as we saw it then and there was what we had to embrace and maintain". This attitude went deep into Whitehead's methods. Professional philosophers, Lowe observes,

like other scholars, show much concern about consistency with at least their own previous opinion. Whitehead did not. He wrote to formulate the truth as he saw it then and there, on the particular subject of his inquiry [p.115].

Evidence of this trait is not hard to find. Whitehead's most accessible, not to mention successful, philosophical treatise is his Science and the Modern World of 1926, which, after a ten-year hiatus, has just re-appeared in print, in an attractive edition from Free Association Books. From within the framework of a masterly historical account of the origin, rise and ultimate triumph of the modern scientific worldview, Whitehead deploys a contrary world-view, organic rather than material, concrete rather than abstract, dynamic rather than static, and laden with human values rather than free of them. Yet what is peculiar is that the most enduring aspect of this work, its superb and still-valuable critique of positivism, founds itself upon a philosophical view totally at odds with the position underlying Principia.

In *Principia*, the underlying metaphysical scheme is one of unconnected individuals, an atomistic pluralism. In harmony with this, the connecting relations between propositions in the axiomatic scheme consist of the weakest possible sort of implication, the so-called "material (or Russellian) implication", which abstracts completely from the meanings of the propositions, and attends "only to their being *either* true *or* false" (p.266).

As Lowe notes, in reference to logical atomism, "Whitehead in his mature philosophy rejected this doctrine" (p.264). Indeed, in *Science and the Modern World* Whitehead's entire critique of positivism results from his vehement attack upon Hume's philosophy, a philosophy whose notion of particular individuals and their causality are so thoroughly and well modelled by the metaphysics and logic of *Principia*.

Explanation of how this startling philosophical shift came about must await Lowe's second volume, which will begin just before Whitehead's move to America. Since this first volume will have so satisfied students of mathematics, logic, philosophy, and, indeed everyone else who has an interest in the culture of the modern world, we will all await with anticipation Lowe's account of Whitehead's transformation from English mathematician to American philosopher.

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