

Review of
**LEO CORRY, *MODERN ALGEBRA AND THE RISE
OF MATHEMATICAL STRUCTURES***

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ROBERT C. REED

This book is a detailed historical account of the development, in one area of mathematics, of the idea of mathematical ‘structure’. For Leo Corry, the key to understanding this development, and perhaps the reason it has until recently received too little attention from historians, is that it was characterized not so much by the usual expansion a new idea brings to the body of knowledge, as by a fundamental change in viewpoint in the practice of mathematical research as a whole. As Corry presents it, the subject has been waiting for the historian willing to treat it within this larger context, going beyond the usual recital of mathematical results in chronological sequence.

Since an analysis of the rise of structure even in algebra alone would be a formidable task, Corry restricts his study to the theory of ideals, as being both typical and of interest in its own right. This is the subject of the first two-thirds of the book, in which Corry describes how a nascent structural point of view gradually emerged in the research of Dedekind, Hilbert, Fraenkel, and others, until developing into a truly comprehensive, ‘modern’ approach to ideal theory with Emmy Noether and her associates in the 1920s. The publication in 1930 of Van der Waerden’s widely influential textbook *Moderne Algebra*, inspired to a great extent by Noether’s work, is, for Corry, the watershed event in the rise of mathematical structure, signaling not just a significant change in the content of algebra as compared to the focus of research in previous decades, but the birth of a new consensus as to what algebra as a discipline henceforth would be. This consensus would determine the proper objects of study, the legitimate open questions, and the appropriate methodologies for solving them. Such matters, having to do less with the mathematical content of algebra than with the discipline of algebra *qua* discipline, constitute what Corry throughout his book