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of a Beginning

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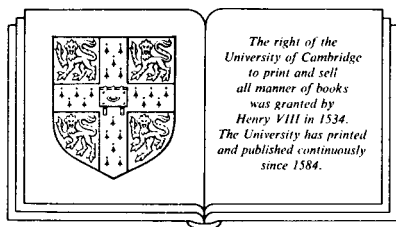
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# George Eliot and Nineteenth-Century Science

The Make-Believe of a Beginning

*Sally Shuttleworth*



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*For my mother and father*

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## Preface

In his review of *Middlemarch* Henry James expressed his distaste for what he deemed the unwarranted intrusion of science into the realm of fiction. The novel was, he observed, “too often an echo of Messrs Darwin and Huxley.”<sup>1</sup> Other Victorian critics shared his disapprobation. A reviewer of *Romola*, for instance, pondering gloomily on the “psychologico-medical study of Baldassarre,” concluded that George Eliot’s scientist-companion G. H. Lewes was probably responsible for this regrettable slip in artistry.<sup>2</sup>

Such royal disdain of “things scientific” was not, however, universal. One noted nineteenth-century reviewer of *Middlemarch* positively acclaimed George Eliot’s “profound sense of the importance of physiological conditions in human life.”<sup>3</sup> Critics in the twentieth century have tended to share this sympathetic response. Since the publication of Bernard Paris’ *Experiments in Life* in 1965, scholarly attention has been focused increasingly on the role of science in George Eliot’s fiction.<sup>4</sup> Henry James’ dogmatic distinction between the realms of art and science now appears, in the light of current research, both wrong-headed and arbitrary: a last-ditch attempt to defend the bastion of art by a writer whose novels were themselves suffused with the notions of nineteenth-century science.<sup>5</sup>

Although all novelists in the nineteenth century were inevitably affected by the close interdependence of social and scientific thought, George Eliot was, in this respect, remarkable. She brought to her writing a breadth of knowledge of contemporary social and scientific theory unmatched by any of her peers. Scientific ideas did not merely filter through into the metaphors and images of her work; in constructing her novels she engaged in an active dialogue with contemporary scientific thought. My aim in this work is to trace the diverse and complex ways in which her involvement with science influenced the development of her fiction. Building on earlier, largely thematic, studies of



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this area, I show how scientific ideas and theories of method affected not only the social vision but also the narrative structure and fictional methodology of her novels.<sup>6</sup>

I shall not, of course, attempt to cover in this study the entire field of nineteenth-century scientific thought since Victorian science was not, as many modern critics tend to assume, a unified body of knowledge, but rather a diffuse collection of disciplines divided internally by competing theories and intellectual schisms. Far from dispersing my energies amidst this “tempting range of relevancies called the universe,” I intend to focus my attention on unravelling just one particular aspect of this web: the field of organic theory. Critics from the Victorian era onwards have spoken of George Eliot’s organic conception of society, or her moral theory of organic unity, but few have defined this conception with any precision, and fewer still have traced its connections to nineteenth-century physiological theory.<sup>7</sup>

The organic idea is generally associated in criticism with notions of harmonious cultural integration and gradual social development – ideas that were ubiquitous in Victorian theory, and so familiar to our ears, that we have tended to ignore their historical origins and to attribute to them a timeless dimension. The Victorian theorists who stressed the dynamic interdependence of whole and part were adhering, however, to premises that were first articulated in both social and physiological thought only at the end of the eighteenth century. This era witnessed, in fact, the parallel development of social theories of organic evolution and scientific theories of dynamic, biological life.

For social theorists writing in the wake of the French Revolution, the idea of organic development offered an attractive conceptual model since it allowed them to reconcile rather threatening notions of social change with more reassuring conceptions of continuity. “Society,” as G. H. Lewes observed, “is thus conceived as an Organism, in which incessant movement accompanies constant stability of form.”<sup>8</sup> Victorian social theorists replaced the atomistic social ideas of the eighteenth century with images of organic interdependence, and subordinated the revolutionary insistence on individual rights to more “wholesome” considerations of social duty.

George Eliot, in common with so many of her contemporaries, eagerly appropriated this organicist philosophy. All her novels, despite their diversity of setting and theme, draw their moral framework from its premises. Daniel Deronda, in his yearning to become “an organic part of social life” articulates the goal of all his predecessors.<sup>9</sup> In each

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of George Eliot's novels, the central drama arises from a clash between the protagonist's desire for individual fulfilment, and the demands of social duty. The essential quest is always for a form of self-fulfilment which would simultaneously contribute to the harmonious development of the larger social whole. Although George Eliot changes the historical setting of the novels, and shifts the focus of attention, from ideas of political integration in *Felix Holt*, for example, to the integrative potentiality of Zionism in *Daniel Deronda*, she yet addresses, within each work, the same fundamental moral issues.

This continuity of moral theme is not reflected, however, in the novels' social vision. George Eliot's first full-length novel, *Adam Bede*, clearly conforms to the social model usually associated with the organic idea: it portrays a society that is ordered, harmoniously integrated, and fundamentally hierarchic. Yet the idyllic harmony of rural Hay-slope contrasts sharply with the petty provincial life of the 1830s in *Middlemarch* and the conflict-ridden world of contemporary England in *Daniel Deronda*. This discrepancy between the moral ideal and social vision of George Eliot's later novels could be explained, in part, by her reluctance to relinquish an ideal that no longer accorded with her awareness of the actual realities of English life. Close analysis, however, reveals that the explanation is by no means so simple. The organic analogy did not, as is commonly assumed, offer a single image of society. Indeed, social interpretation of the organic idea varied in accordance with the physiological premises each theorist adopted. Thus the vitalist conceptions which sustained German Romanticism differed fundamentally from the physiological theories which underpinned the positivist philosophy of Auguste Comte. The power of the organic idea as a conceptual model lay, in fact, in the diversity of possible interpretations it offered. The movement of organicism in nineteenth-century thought should be regarded, therefore, less as a single idea than as a language that imposed a uniform structure on all who attempted to extend its vocabulary.<sup>10</sup>

In tracing the impact of organic theory on George Eliot's fiction, I shall be primarily concerned with the two figures who fundamentally affected her thought: Comte, and G. H. Lewes. While Comte's ideas of the evolution of the social organism influenced George Eliot's early conceptions of social development, Lewes' theories ultimately had the more significant impact on her work. Lewes, in extending the biological premises of Comte's conception of organic life, produced a radical theory of social and psychological development that also had dramatic

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implications for his theory of scientific method. The effects of Lewes' organicist theory can be discerned in George Eliot's changing conceptions of social order, and in the transformations in the psychological theory and narrative methods of her novels.

The evolution of George Eliot's interpretation of organic theory can best be measured by a comparison between her first and last novels. The traditional ideal of organic social harmony presented in *Adam Bede* is reflected in the psychological theory, and in the unified, cyclical narrative structure of the work. *Daniel Deronda*, by contrast, portrays both a society and characters riven by contradiction, while the unified structure of the earlier work is supplanted by a more open and fragmented narrative form which disrupts both spatial and temporal continuity. The contrast is evident, too, in George Eliot's shift in narrative stance. In *Adam Bede* she adheres to the scientific and artistic creed she had earlier outlined in her essay, "The Natural History of German Life." She adopts the role of natural historian, a passive observer of organic life, concerned only to record the unchanging details of external form. Her empiricist method sustains the novel's static conception of society and character. In *Daniel Deronda*, however, her narrative method is closer to that of the creative, experimental scientist, to whom the visionary Jew, Mordecai, is compared. The methods of natural history are replaced by those of experimental physiology. No longer a passive observer, but now an active participant, George Eliot actively creates the experiment of her novel. This change in method is reflected in the more dynamic structure of the novel, and in its social and psychological theory. Far from reflecting an image of static harmony, it actually encompasses conflict and contradiction. All these changes, I shall argue, can be correlated with transformations in contemporary scientific theories of the organic.

Through close analysis of the inter-relationship between the social and scientific aspects of organicism in George Eliot's work, I intend to challenge the assumption often made by radical historians that science is only employed in social theory to ratify the *status quo*. This argument holds true only partially for George Eliot's work since, in the later novels, scientific conceptions actually undermine dominant social theories and modes of categorisation. Similarly, in response to the recent Marxist critique of organicism, I would like to rescue concepts of the organic from an unproblematic association with notions of totality or unity, whether social, psychological, or aesthetic.<sup>11</sup> I am indebted to this critique for exposing the relationship between theories of historical

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continuity, and a unified psychological subject, and for showing how these assumptions concerning unity and continuity dictate the techniques and form of the realist novel. Analysis of George Eliot's work shows, however, that these theories fail to take account of the complexity of nineteenth-century social and scientific thought. Although George Eliot worked squarely within an organicist framework, one can yet discern, in the predominantly realist forms of her fiction, distinct changes in her theory of history, society and psychology.

The structure of this work follows George Eliot's own pattern of composition. Within each novel she examined different aspects of the social, moral, psychological, and political issues raised by organicist theory, and employed a different strategy to achieve narrative resolution. In order to capture fully the relationship between the theme and structure of each work, and to avoid repetition of material, I have chosen, therefore, not to adopt a thematic organisation but to treat each novel individually, focusing each time on a separate issue.

The first chapter examines the social, psychological, and political ramifications of organic theory in nineteenth-century European thought, while the subsequent chapters analyse the impact of the theory on the narrative structure of George Eliot's works. The chapter on *Adam Bede* addresses the relationship between the practice of natural history and the novel's narrative organisation and social vision. George Eliot's own verdict on this novel was that it was "more complete and better balanced" than her following work, *The Mill on the Floss*. She believed, however, that the latter had a "profounder veracity."<sup>12</sup> The "veracity" of *The Mill* perhaps stems from the fact that it confronts directly many of the problems in organic theory which were never articulated fully in the earlier novel. The chapter devoted to this work explores the internal narrative conflict between theories of organic social and psychological development and the catastrophic structure of the plot. In *Silas Marner* George Eliot seems to return once more to the harmonious social vision of *Adam Bede*, but her ambivalent response to organic theories of social evolution, suggested by *The Mill*'s concluding flood, is still in evidence. The analysis of *Silas Marner* also focuses, therefore, on the issue of internal conflict since, like *The Mill*, this novel seems to offer two different models of history, one based on theories of gradual organic development, and another which privileges notions of chance and disruption.

On completion of her "legendary tale," George Eliot turned away

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from her accustomed English rural setting in order to consider the issues of nineteenth-century organicism within the setting of fifteenth-century Italy. The chapter on *Romola* examines the various ways in which she employed the idealisation made possible by this temporal and cultural distance to explore the social implications of Comtean theory. In her subsequent novel, *Felix Holt*, George Eliot again adopts the clarity of historical perspective to explore contemporary social issues, but this time her setting is, once more, the transitional society of England in the 1830s. With the increased political urgency created by the proposed Second Reform Bill, the underlying political issues in *Romola* and the earlier novels are raised, in this work, to the level of explicit theme. The sixth chapter examines, in accordance with the dual structure of the novel, the political and sexual implications of organicism, tracing the relationship between political theories of social submission and duty, and Victorian ideals of womanhood.

*Middlemarch*, like all George Eliot's preceding novels, focuses on the individual's quest for social integration, yet it displays neither the political crudeness nor the naive idealisation of "woman's lot" found in certain sections of *Felix Holt*. Faced with apparent irreconcilable contradictions within the traditional organic model, George Eliot now adopts explicitly the complex model of organic life defined, within the novel, in Lydgate's biological theory. In the *Middlemarch* chapter I focus on the various ways in which this theory affected the social analysis and narrative practice of George Eliot's "experiment in time." The term "experiment" rightly belongs, however, to her final novel, *Daniel Deronda*, in which she develops the social and methodological implications of the dynamic model of organic life to their full extent. In this last chapter, I show how the innovative form, intricate psychological analysis and idealism of *Daniel Deronda* all stem from organicist theory.

My aim within each chapter is thus to explore the key social and political issues of nineteenth-century organic theory, and to chart the various ways in which George Eliot employed scientific theory to achieve narrative resolution of the problems addressed by the organic social metaphor.