Stephen Clucas’ collection of richly documented and varied essays is composed of 12 papers originally published between 1993 and 2008. They are neither divided into sections nor ordered according to the chronology of their composition or publication. Rather they are organized around a number of specific themes disposed in a historical sequence that gives the volume a unity of narrative and intent that not all collections of essays possess. These themes have been at the centre of this author’s attention for many years. According to the brief preface, they continue to represent his principal interests today. He therefore asks the reader to consider the volume as representing work in progress rather than a fully defined itinerary.

The preface itself is of considerable interest, starting as it does from a letter written to Clucas by the late Hugh Trevor-Roper (Lord Dacre). The letter expresses his dismay at some of the areas into which this author was venturing:

> The intellectual history of the pre-Enlightenment is a fascinating subject: fascinating and, often, deterrent: the disengagement of natural philosophy from its theological integument is so complex and so painful, and accompanied by such desperate attempts to tighten the disintegrating vestment around it. I’m afraid I really despair of understanding those last convulsions.

Although Clucas admits to sharing in both the fascination and the deterrence, the letter (which does him much honor) seems quoted above all to enhance the value of his determined march into this
harsh and at times shadowy territory, which in a last provocative comment he also claims ‘we would do well to try to understand if we are to understand the present’. The volume, however, exhausts itself in terms of a rigorously historical intellectual enquiry, furnishing no hints as to how we are to relate its contents to the culture of today.

The first group of three essays deals with the figure of the Elizabethan Magus, John Dee, much discussed in both his own times and ours. Not content with such an intrepid choice, Clucas immediately engages with the most obscure aspect of Dee’s remarkably varied intellectual story, squarely facing up to Dee’s final phase of angelic conversations and his tortured relationship both with the angels who presented themselves at his visionary sessions and with his skryer (or intermediary) Edward Kelley—by many, both then and now, considered a probable phony with criminal intents. Clucas raps on the knuckles those who take up such preconceived, ‘post-enlightenment’ attitudes, which he considers ‘unhelpful’ and improper in a historical enquiry. The attempt made here is to understand in terms of the culture of the time what Dee—in his earlier years one of the foremost intellectual figures of Elizabethan England—was seriously trying to do in his final years, and on the basis of what sources and currents of thought he was doing it. In carrying out this task, Clucas transforms the image of Dee as a Neoplatonic Renaissance Magus (as he appears in the work of Frances Yates and her epigonies), demonstrating with impressive and convincing documentary evidence that the magic dimension at work here had a medieval, pseudo-Salamonic foundation, closely entwined with ancient Christian practices of prayer and invocation. The Dee who emerges can thus later be objectively considered as at least partially acceptable by an Anglican cleric such as Meric Causabon [Essay II], who approved of Dee’s devotion although chastising him for his naïve habit of being deceived by evil angels, whom he too often failed to distinguish from those who were good. This devotional and pseudo-Salamonic Dee, more concerned with magic as practice and prayer (and thus with contemplation of magical seals and tables) than with their intellectual foundation (that is, with reading and interpreting them), is what Clucas then rediscovers [Essay III] in Dee’s Liber misteriorum.

The Dee who emerges from these essays appears much more of a native, northern phenomenon, still deeply rooted in a medieval past, than the Italianate ‘Renaissance Magus’ of the Yatesian version.
Yet, he is surely too complex a figure to be judged only on the evidence of his final years. A full evaluation of Dee in the light of these essays would need to take account also of his earlier years, of the Dee who taught mathematics to Sir Philip Sydney and his circle, who published an important edition of Euclid, and whose remarkable library contained the text of Copernicus’ *De revolutionibus*. The essays here make no attempt to connect up to this earlier phase; nor do they mention the contemporary discussion that Dee’s final years gave rise to. For example, Christopher Marlowe’s *Dr. Faustus* is a text that surely mirrors the story of Dee in Faustus’ sudden decision to throw to the winds all his previous intellectual achievements, in his ardent desire to transform the world through magic, and in his desperate requests to his spirits to enlighten him with total and immediate knowledge, bypassing the need for logical process and reasoning. And does Faustus not mirror Dee too in the paucity of the results he obtains, in the submission with which he is constantly forced to bow down to his angels, good or bad (shades of Mephistopheles)? Marlowe, who was no post-Enlightenment rationalist, presented his dramatic portrait of the magician as a tragedy. Marlowe was a contemporary of Dee’s with links to the Sydney circle; so he probably knew (or knew of) Dee personally.

Clucas’ essays undoubtedly question the previous Yatesian image of Dee in challenging and (in this reader’s opinion, at least) convincing terms, and in doing so they represent a valuable contribution to Dee studies. They also stimulate a series of questions about the wider significance of Dee’s story to which these essays themselves, carefully crafted to remain within a very specific and clearly defined framework, furnish no answer.

A second group of essays [IV–VII] deals primarily with Giordano Bruno’s art of memory. Clucas had the good fortune to come early into contact at London University with Giovanni Aquilecchia, an important point of reference for his Bruno studies. In this context, Clucas has chosen to underline above all Bruno’s memory works, thus keeping alive in the English-speaking world a tradition of studies which other recent English-language scholars of Bruno have tended to consider marginal. This choice means that Clucas has perforce to measure up to Frances Yates’ still fundamental volume *The Art of Memory* [1966], where Bruno’s memory-art is considered in the light of Ficinian astral magic. A large part of these four essays
is dedicated to questioning this Yatesian interpretation, taking as inspiration the work done in Italy by Paolo Rossi and later by Leen Spruit and above all Rita Sturlese, who considers Bruno’s art of memory as specifically an ‘ars’ or a logical-mnemonic technique, which, although founded on metaphysical doctrines specific to the ‘Nolan philosophy’, remains largely unconcerned with Ficinian astral magic or talismanic influences. A significant contribution to this discussion is provided by Clucas in Essay IV which brings into the picture not only the memory treatises of Alexander Dicson (whose importance had already been underlined by Frances Yates) but above all the pages on memory in manuscripts of Walter Warner which, although already discussed in other contexts in relation to Bruno’s thought, had not previously been considered for their memory content. Clucas here underlines the importance of Warner’s insistence on ‘notation’ or ‘characterization’ to store verbal discourse, demonstrating how he integrated Brunian mnemotechnics with his Ramist training and an Aristotelian psychology. This essay presents a reading of Bruno’s art of memory and its successive influence as without any significant magical content and, thus, as essentially different from that put forward by Frances Yates.

This well documented and thought-provoking essay is followed [Essay V] by what seems to be a degree of re-thinking of this thesis. Taking as his main locus Bruno’s final work on memory, De imaginum, signorum et idearum compositione, Clucas now argues that some kind of magical content to Bruno’s memory-art has nevertheless to be recognized. The discussion here is characteristically serious and well founded on a close reading of both Bruno’s own works and on recent criticism; but it leaves the reader with an uneasy impression of a subject not completely brought into focus. It is only in the following piece [Essay VI], which, although a previous publication in chronological terms, is centered largely on the Triginta sigillorum, that the solution is delineated in the light of Bruno’s own claim that Love, Art, Magic, and Mathesis are the four internal rulers of human action. So magic is not the defining characteristic of Bruno’s art of memory, as Yates had claimed, but rather one of four cardinal virtues of the mind, one component only of memory, closely connected to the imagination. This conclusion allows Clucas to finish off with a definition of the art of memory conceived of as spiritual exercise designed to regulate the disordered affections of the soul by connecting
them to the intelligent order of natural agents. This is a distinguished contribution which succeeds in the difficult task of connecting Bruno’s art of memory to his natural philosophy.

Liberated at last from the necessity of measuring himself against Yates, Clucas, in the last of these four contributions [Essay VII], can go off on a quite different tack, concerning himself with the rhetoric of scientific dialogue in both Bruno and Galileo. The rhetoric of scientific discourse has been at the center of much recent attention, and this piece is perhaps less innovative than the other essays. Nevertheless, it is of value in re-proposing a Bruno-Galileo connection that is often ignored, and interesting in its perception that the digressive techniques used by both authors in their pro-Copernican dialogues are essential in so far as the digressions themselves often contain some of their most original and significant observations.

Essays VIII–X are concerned with corpuscular matter theory and particularly with 17th-century English atomism, specifically of the Northumberland and Cavendish Circles, above all in their complex relationships to Aristotelian theories of matter and form. Rather surprisingly, this subject is approached not through Bruno’s *De triplici minimo* of 1591 (which actually contained one of the earliest modern attempts to delineate an atomistic theory of matter) or even through Pierre Gassendi’s revival of ancient Epicureanism (known in England through Charleton’s *Physiologia Epicuro-Gassendo-Charltoniana* of 1654), but rather through the influence of native medieval thinkers such as Grosseteste and Roger Bacon. This is because Clucas here is self-consciously writing in the light of a number of recent claims (by Roy Porter, Mikulás Teich, Ugo Baldini) that history of science needs to be newly approached in local or national terms rather than through the more traditional global narrative of ‘the rise of modern science’. The medieval writers mentioned above, with their still Aristotelian concept of substantial forms, are seen to have survived as still lively presences in the culture of early modern England. Walter Warner’s concept of *vis* and his discussion of the nature of fire and light, but also Nicholas Hill’s more theological concept of corpuscularianism and (perhaps a little too briefly) Francis Bacon’s ‘natural motion of the atom’ as well as the atomism of Margaret Cavendish, are all seen as stages in the negotiation between the new corpuscular philosophy and the survival in 17th-century England of soul-like substantial forms of Aristotelian derivation. Only when Clucas arrives at the more
mature and more fully corpuscular philosophy of Robert Boyle does he see a ‘modern’ atomistic theory as developing in England.

One may wish to question the value of national narratives in the context of the very international milieu of the European enlightenment or Clucas’ final claim that the only truly ‘revolutionary’ aspect of an emerging ‘modern’ science lay in this complex negotiation between the lengthy survival of an Aristotelian doctrine of substantial forms and the new, more mechanistic philosophy. But to do so here would be unfair. These are remarkably dense and erudite essays, which undoubtedly offer a contribution of value to the historical enquiry into early modern English atomism.

The final two essays (although by no means the most recent in terms of their composition) represent a new departure with respect to the preceding contributions which brings the narrative of the book to its final historical stage in the post-Baconian pre-Enlightenment project of scientific communication developed by Samuel Hartlib. The strength of these essays derives from what was clearly an intense and fruitful season of studies in the Hartlib archive held at the University of Sheffield. Here we find abundant quotations from previously unknown and long buried collections of letters to and from Hartlib, as well as notes and memoranda by Hartlib himself concerning his management of a social network of scientific practitioners. These are essays that offer a rich harvest of new materials (in the first essay, centered on Hartlib’s wide network of scientific correspondents; in the second essay, more specifically on the chemical component of that network). Indeed, at times the sheer abundance of quotations from often obscure and unknown voices from the Hartlib past finishes by overwhelming the reader with an excess of ill-spelt and not always illuminating concerns.

From this at times confused chorus of voices, however, Clucas draws a number of interesting and important conclusions. He shows how not only empirical experiment but also the problem of digesting, indexing, collating, and commenting on the already unmanageable number of ancient and renaissance printed texts became a major concern of Hartlib’s rationalizing project. He also shows—in some concluding pages that link up his discourse in this volume to Dee’s angelic conversations that had opened it—how this Protestant scientific project was far from wishing to limit or contest the sphere of
religion. On the contrary, in spite of their post-Baconian credentials, the pursuit of secondary causes is rarely separated by these scientific practitioners from their Protestant faith with its accompanying zeal for social reform. Scientific experiments appear to have been undertaken by Hartlib and his circle as a project designed to celebrate the glory of God, in whose light they hoped to improve the history of the world. This strict dependence of the world of nature on the transcendent sphere of God and absolute truth, as Clucas convincingly demonstrates, ensured the survival of medieval mysticism, of Renaissance Neoplatonism, as well as both medieval and renaissance Hermetic strands of thought, well into this still uncertain prelude to enlightenment rationalism. Over the horizon, the reader catches an occasional glimpse of the figure of Isaac Newton, the giant towards whom the whole volume inevitably tends but with whose imposing shadow Clucas has still to engage.

BIBLIOGRAPHY