Attention is also paid to the inheritance of humoral complexion and, to a lesser extent, of acquired characteristics, such as eloquence. Planetary influence too is given its due to account for exceptions and congenital defects. Any doubts about the influence of the planets are dispelled by reference to Alexander, who inherited his father's appearance and temperament following careful planning.

For a guide to these fascinating areas the reader will look to the introduction, but risks disappointment for it promises more than it delivers, primarily because its thrust seems heavily determined by secondary sources. One wonders whether consilia or the Sphere of Pythagorus would otherwise be mentioned, had they not previously been written about. This all-inclusive approach makes for a reliable and cautious but ultimately unambitious survey which hides the wood from the trees. Nevertheless, the reader will gain a good grasp of the current issues in vernacular medicine, but would no doubt prefer more discussion. An exploration, with examples, of how medieval medical writers covered embryology would have been preferred to a list of authors whose works contain passages on the subject (p. 32). In this respect reference could have been usefully made to Joan Cadden, *Meanings of sex difference in the middle ages* (Cambridge, 1993) or to the discussion and listing of scholastic questions on reproduction and sex in Nancy Siraisi, *Taddeo Alderotti and his pupils* (New Jersey, 1981). The author's cautious approach at times leads to a reconciliation of issues which may not harmonize as smoothly as suggested. The idea that early translators of learned texts balanced the needs of their vernacular audiences with the traditions of Latin scientific writing in order to improve vernacular learned discourse closes down further possibilities and nuances. Was there room, for instance, for any intellectual ambition on the part of translators to create a body of vernacular writings, especially since the author suggests that the translator translated another text in the same manuscript?

The edition is carefully edited and accompanied by copious notes on language and on the Latin text. The comparison with Latin manuscripts, of which there are many, is helpful as is the paraphrase into modern English. More detail on sources and citations in the text would have helped further, e.g. that from Hippocrates on page 169 surely derives from *Aphorisms* V.31. All in all this is a cautious and careful work.

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Joseph Ziegler, *Medicine and religion c. 1300: the case of Arnau de Vilanova*, Oxford Historical Monographs, Oxford, Clarendon Press, 1998, pp. x, 342, £45.00 (0-19-820726-3).

Until well into the 1970s the burden of historical positivism resulted in the intellectual history of European medicine and science being tacitly (if not explicitly) constructed in terms of a growing process of secularization and experimentalization of closely delimited disciplines according to the pattern of the disciplinary history tradition. The origins of this process were disputed between those who placed them in the Renaissance/Scientific Revolution, and those who found them in the late Middle Ages by denying any essential rupture between this period and the early modern times. During the two last decades, however, this "big picture" has been gradually replaced by another that, with different nuances, has postponed until well into the nineteenth century the effective unfastening of medicine and natural philosophy (a more suitable designation for science before then) from religious tutelage and, consequently, the rise of medicine and science in the modern sense of these terms.

In these new circumstances, historians of pre-modern medicine and natural philosophy increasingly deal with their topics in an intellectually more integrated and socially more contextualized way and, consequently explore the relations of medicine and natural philosophy with religious beliefs in specific historical contexts. The monograph here reviewed is an outstanding example of the impact of these historiographical changes on studies of late medieval university medicine—a fruitful research area where the echoes of the old historical views are still perceptible.

Medicine and religion c. *1300: the case of Arnau de Vilanova* consists of a revised version of the DPhil. thesis that Joseph Ziegler (Lecturer in the Department of General History at Haifa University, Israel) submitted in 1994 to Oxford University. Ziegler is concerned about the cultural role that learned medicine played among European social elites at the turn of the fourteenth century, a critical time in the process of the incorporation of medicine into the university system, and of the diffusion of this medical model all over Western Europe. He focuses on the relations between academic medicine and Christianity which, according to his convincing line of argument, were much closer and more convergent than usually assumed by historians of medieval medicine.

Ziegler mostly relies on a thorough and penetrating analysis of the language (metaphors, analogies and other tropes) of medical and spiritual sources written by physicians, as well as of preachers' manuals and sermons. Central to his work is the detailed and well-documented study of the wide-ranging production of the Montpellier medical master and religious polemicist, Arnau de Vilanova (*c.* 1240–1311). Arnau's works are compared with other contemporary writings, particularly those by the Genovese physician closely linked to the Franciscans, Galvano da Lepanto (*fl.* 1300), and the friar Giovanni da San Gimignano (*fl.* 1310–1313).

In the four central chapters of his study, Ziegler successively deals with the hidden linguistic codes in Arnau, Galvano and other "theologizing physicians" in both their medical (Chapter 2) and spiritual works (Chapter 3); with the medical language used in their sermons and/or preachers' manuals by the Dominican Giovanni da San Gimignano, the Franciscan Servasanto da Faenza (d. *c.* 1300) and the Benedictine Pierre Bersuire (d. 1362), which is organized into five major categories, namely the medical model, the vocabulary of disease and the anatomy of Christian practice, of the Christian body, and of the mind and the intellect (Chapter 4); and with the major foci of potential tension between contemporary clerics and physicians through their expression in Arnau's works. The monograph has two appendices with lists of suggested medical analogies in the works of the above-mentioned exponents of the Dominican (app. I) and Benedictine (app. II) orders, and with the expressive sermon addressed by the Dominican Humbert de Romans (d. 1277) to students of medicine (app. III) with which Ziegler presents the topics under discussion at the beginning of the introduction (Chapter 1).

According to Ziegler, convergence rather than separation or rivalry characterized the relations between university medicine and Christianity in Europe at the end of the thirteenth century. It was a double convergence because, on the one hand, clerics exhibited a growing tendency to appropriate scholastic medical knowledge, language and authorities in their sermons and preachers' manuals; and, on the other, university medical practitioners assumed that the contemplation of spiritual matters was important medically for both the spiritual and physical health of their readers as well as revealing the mysteries of the Creator and His Works.

Implicitly, Ziegler's study calls historians' attention to the need to achieve a more carefully balanced view of the manifold relations between university medicine and

Christianity in late medieval Europe, and a more integrated intellectual view of medieval physicians. Readers are warned against considering the case of Arnau as unique and exhausting every possible relationship between medicine and religion. Nor should this historical exploration be restricted to medicine, for a general change in attitude towards nature involved every intellectual area in late medieval Europe.

In sum, Ziegler's stimulating monograph has opened up a new and promising area for historical research. His exemplary analysis of the case of Arnau de Vilanova offers other scholars a good model with which to examine from the same perspective other relevant cases of medieval physicians, not only Christian, but also Jewish and Muslim.

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Heinz Schott and **Ilana Zinguer** (eds), *Paracelsus und seine internationale Rezeption in der frühen Neuzeit: Beiträge zur Geschichte des Paracelsismus*, Brill's Studies in Intellectual History, vol. 86, Leiden, Brill, 1998, pp. xii, 274, Nlg 170.00, $111.00 (90-04-10974-9).

Ole Peter Grell (ed.), *Paracelsus: the man and his reputation, his ideas and their transformation*, Studies in the History of Christian Thought, 85, Leiden, Brill, 1998, pp. ix, 351, Nlg 195.00, $128.74 (90-04-11177-8).

These volumes on Paracelsus's legacy both arise from conferences organized by their editors: Grell's was held in Glasgow in 1993, Schott and Zinguer's took place in Bonn and Heidelberg during 1995. Of the two books, Grell's offers the more coherent package; one that will recommend itself to teachers of medical history in English-speaking countries. All of its thirteen articles are in English, there is a consolidated bibliography, and much of the book is devoted to situating its own contents within the broader framework of the literature on Paracelsus. By contrast, Schott and Zinguer's book is distinctively European in orientation, with five articles in German, five in French, and one in English. There is no combined bibliography, and the editors have little to say explicitly about where their book fits into the "big picture" of Paracelsus studies. Despite these drawbacks, however, I suggest that for those who can afford both, Schott and Zinguer should be read in tandem with Grell. To show how they complement each other I will focus on three main themes which their contents collectively address: the historiography of Paracelsus studies, studies of Paracelsus, and the reception/appropriation of Paracelsus, especially during the century after his death.

Unsurprisingly, the articles which explicitly focus on historiography are all in Grell's book. Stephen Pumfrey offers a critical review of recent, largely Anglophonic secondary literature. He highlights the ongoing confusion over the lables "Paracelsian" and "Paracelsianism" (which, it may be noted, are used uncritically in several articles in both books), and concludes that they are best thought of in terms of ideological debates about the proper relations between science and religion. A similar approach is taken by Andrew Cunningham, who shows the futility of trying to reach the "real" Paracelsus, stripped of layers of projections fashioned by later authors, as well as by the subject himself. These projections have taken many forms over the intervening centuries. J R R Christie shows how Edinburgh chemists were hailing Paracelsus as a founder of their discipline in the mid-eighteenth century, while Dietlinde Goltz finds similar rhetorical claims among nineteenth-century British occultists and twentieth-century Swiss psychotherapists. Her survey of scholarly historical literature from the last hundred years shows that