

reader that translations and equivalents for mediaeval drug names are problematic, for instance, *al-laymūn* is translated as lemon, but lime is equally plausible.

In some places, Chipman suggests that ineffective drugs were not included by al-Kūhīn al-‘Aṭṭār and that he added the tag ‘beneficial’ (*nafi*‘) to a remedy whenever he found a drug to be effective. Historians should indicate, however, that their statements about the efficacy of drugs remain problematic as long as we lack reliable research about how drugs were tested and how mediaeval notions compare to modern ideas of ‘effective’ or ‘tested drugs’.

Finally, it has to be said that Brill has done a major disservice to the author and adversely affected the wider dissemination of an important scholarly study. Individuals will be reluctant to purchase a volume that, in addition to being over-priced, has a somewhat displaced cover with a cheap glue binding, reminding the potential buyer of a poor-quality pirated copy of an originally expensive book. The contents of the present volume deserve a much better physical presentation.

**Daniel Nicolae,**

University of Oxford

**Maaïke van der Lugt and Charles de Miramon** (eds), *L’hérédité entre Moyen Âge et Époque Moderne: Perspectives Historiques*, Micrologus’ Library, 27 (Florence: Sismel – Edizioni del Galluzzo, 2008), pp. vii + 416, €58.00, ISBN: 978-88-8450-309-1.

This book is a collection of essays on the place of heredity in the thought of the Middle Ages. Its core is the clear demonstration by Maaïke van der Lugt that the notion of hereditary disease emerged in the thirteenth century, and found a clear expression in the fourteenth. Its roots were in the writings of Arab philosophers and doctors, but what was revolutionary was the metaphoric transfer of

the expression ‘hereditary’, previously used to designate goods and properties transmitted through generations, to the domain of medicine.

This book challenges the view that the Renaissance was a revolutionary time for medical and biological thought. The opposite is true: the notion of hereditary disease emerged in the thirteenth century, was not deeply transformed during the Renaissance, and took on increasing importance at the end of the eighteenth century, finally leading to the birth of a scientific theory of heredity in the middle of the nineteenth century.

But this book also challenges the alternative hypothesis: heredity was a central question for thinkers of the Middle Ages. The justification of the power of the nobility by the existence of a ‘noble blood’, the rise of anti-semitism supporting a differentiation between human beings, the efforts made to breed animals of higher quality, the progressive interpretation of original sin in biological terms, the rules established by the Church against consanguinity: all would have contributed to the emergence of an hereditarian vision.

The different contributors show that the situation was much more complex. There was a sharp contrast between the hereditarian functioning of society, with a strict hereditarian transmission of power and charges, and the numerous factors which opposed this hereditarian vision: the conviction, based on the Bible, of the uniqueness of human nature, the emphasis placed on the conditions surrounding conception and pregnancy to explain human characteristics, the importance of the notion of complexion in medicine, a product of nature and local environment, opposed the emergence of a science of heredity. The widely accepted belief in an heredity of acquired characters made the picture even more fuzzy. The rules preventing consanguinity were not justified by a ‘eugenic’ project. The existence of ‘noble’ blood was a popular conception, disconnected from the writings of doctors. The improvement in animal breeding only concerned animals of the nobility, falcons and dogs. The interpretations

of original sin were numerous and contradictory. The consequence was that the list of hereditary diseases included leprosy and gout, but none of the diseases that today would be found in a similar list.

Two interesting lessons emerge from reading this book. The first is the role of interdisciplinarity considered in an extensive way. The emergence of the notion of hereditary disease in the Middle Ages required borrowing the notion of heredity from its use in law. The concept of latency, necessary to explain the transmission of hereditary diseases, has its roots in theology.

The second lesson comes from the comparison with what happened in the nineteenth century. The rise of a science of heredity was made possible by the coalescence, the conjunction of different social, scientific, and epistemic transformations. In particular, the disconnection between the characteristics of organisms, humans included, and the place in which they were living, due to the increasing circulation of plants, animals and humans, as well as the classifications of human beings following colonisation, had very important roles in the rise of a science of heredity. It explains the limits of the hereditarian vision in the Middle Ages.

All the contributions collected in this book are rich in information and offer acute critical perspectives. This book will be of interest not only to those involved in the history of medicine in the Middle Ages, but also to all historians working on the interaction between sociocultural conditions and the growth of scientific knowledge.

**Michel Morange,**  
Ecole Normale Supérieure, Paris

**Charles Webster,** *Paracelsus: Medicine, Magic and Mission at the End of Time* (New Haven: Yale University Press, 2008), pp. xiv + 326, £30.00/\$40.00, hardback, ISBN: 978-0-300-13911-2.

Controversy has followed Paracelsus. In his lifetime and for a century and a half afterwards his supporters and detractors were strongly opposed. There were those, however, who compromised and accepted some of Paracelsus' medical and chemical theories, or assimilated them into Galenic medicine whilst rejecting his radical social and religious views. Historians have also been divided, some tending to ignore his influence on medicine, especially as by the beginning of the eighteenth century it became less discernible. Others, German scholars above all, have seen Paracelsus as not only a seminal figure in the attack on elite university-based Galenic medicine, but also as an important player in the reform movement in sixteenth-century Germany.

Charles Webster is amongst the fervent supporters. In this important book he goes beyond Walter Pagel's path-breaking work which contextualised and explicated Paracelsus' natural philosophical, medical and chemical ideas. Published some sixty years ago, Pagel's *Paracelsus: An Introduction to Philosophical Medicine in the Era of the Renaissance* was a brilliant analytical work that took a broad approach to the history of ideas and did not limit itself to a narrow 'rationalistic' perspective.

Today, most students and many historians of medicine find its conceptual scope and deep scholarship difficult, even too difficult. Moreover, the social and many of the religious aspects and contexts to Paracelsus' work were only very lightly sketched in by Pagel. Webster, by contrast, has written a very lively, readable book which brings together the medical and the social-religious radicalism of Paracelsus and shows that it was of one piece.

Webster portrays Paracelsus, the radical, eagerly waiting for the end of time, which he believed would come in his own lifetime, when the churches would be judged and found wanting, whilst the true believers would be gathered in by God. Paracelsus' mission was to prepare society, or rather true believers, for the final days through a symbiotically unified critique of society, religion and medicine.