also help to balance the critical approach adopted by Carol and, all too often, social historians and scientists, with regard to physicians and the "medicalization" process. If the physicians were indeed (and still are) too often arrogant, filled with self-indulgence and lack of empathy towards patients, it would be of interest to understand better how they dealt with the complex problems they faced.

Secondly, one should not forget that death was reconceptualized at the turn of the eighteenth century, and that pathological anatomy provided the foundation for a new medicine. To be sure dissections were practised well before the nineteenth century; however, with so-called Paris medicine and the birth of hospital medicine, death was "turned for the first time into a technical instrument that provides a grasp on the truth of life and the nature of its illness. Death is the great analyst that shows the connexions by unfolding them, and bursts open the wonders of genesis in the rigor of decomposition" (Michel Foucault, Birth of the clinic, 1973). According to Foucault, a complex relationship between death, disease, the body and the physician has allowed this emergence of the modern form of medicine. A discussion of this thesis as well as of the political function of the physician that accompanies this transformation would have been welcome.

Finally the last chapter is an attempt to clarify the complex entanglement of technical, moral, sociological and philosophical questions raised by death in modern hospitals. Medical discoveries are ahead of social change and the transformations of the "mentalités", or so the author claims. This often repeated idea could easily be challenged. Indeed the "new" history of science has insisted on the social and cultural shaping of science and technology. It is difficult to understand how physicians would have "appropriated death" without the assent of our society as a whole. Here the contributions to the analysis of our attitude towards pain and death by sociologists and anthropologists is paramount and should have been cited. Among North American authors one should

definitely quote Barney Glaser and Anselm Strauss (Awareness of dying, 1966), Renee Fox ('The sting of death in American Society', Soc. Serv. Rev., 1981), or Margaret Lock (Twice dead: organ transplants and the reinvention of death, 2002); among the French authors it is difficult to ignore Isabelle Baszanger's work on pain medicine (Médecine et douleur: la fin d'un oubli, 1996, translated into English as Inventing pain medicine: from the laboratory to the clinic, 1998) and on the frontiers between innovations in medical oncology and palliative medicine.

Despite these unanswered questions and shortcomings, this book stands as a useful contribution to the complex history of death in France and deserves to be read by scholars and others interested in medical history.

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José Ramón Bertomeu-Sánchez and Agustí Nieto-Galan (eds), Chemistry, medicine, and crime: Mateu J. B. Orfila (1787–1853) and his times, Sagamore Beach, MA, Science History Publications/USA, 2006, pp. xxv, 306, illus.. \$52.00 (hardback 0-88135-275-6).

Even those with a cursory knowledge of the history of medicine will have come across the name of Mateu Josep Bonaventura Orfila (1787–1853), chemist, doctor, and founder of the discipline of toxicology. A smaller number might know that, while he forged a prominent academic career in Paris, he originally hailed from Minorca, and, as Agustí Nieto-Galan and José Ramón Bertomeu-Sánchez show in an excellent introduction to this collected volume, served an important historical function in the promotion of a contested Catalan identity. What better reason, then, than the 150th anniversary of Orfila's death to invite a group of historians to Minorca to present papers on the history of toxicology, the history of chemistry, and the place of the scientific expert in the courtroom.

It is toxicology, therefore, that provides the principal interest of this collected volume for the historian of medicine, although this topic quite naturally opens onto the wider issue of the evolution of expert witnesses in court. Unlike many such collected volumes, this one remains focused, with many of the papers dealing with the use of analytical techniques to detect poisoning and the challenges presented by this type of evidence in the trials of suspected murderers. The leitmotiv for this series of papers is the idea of making the invisible (the poison hidden in the cadaver) visible (the sensible signs of tests, which could be olfactory or visual), a task that motivated and associated a group of "professional" toxicologists including Robert Christison (Anne Crowther), James Marsh (Katherine Watson), Alfred Swaine Taylor (Ian Burney), and, of course, Orfila himself. Indeed, while he is mentioned in all the papers, Orfila's work is most closely examined by Bertomeu-Sánchez with respect to the notorious Lafarge affair. To be a little more precise, the most prominent subject in this collection is one particularly high-profile toxicological conundrum, the proof of the presence of arsenic in a cadaver. Nevertheless, while Bettina Wahrig situates Orfila in the context of German toxicology, Sacha Tomic adds an interesting complement in his treatment of the development of analytical techniques for identifying alkaloids as poisons, illustrating new technical responses to new toxicological threats. Not all the papers are strictly about toxicology, however, there are also contributions by María José Ruiz-Somavilla and Ana Carneiro that are of interest to those studying the institutional development of biological or medical chemistry, treating the considerable influence of Orfila in these arenas. There are also articles that take on other aspects of Orfila's work, notably Antonio García-Belmar's paper on Louis-Jacques Thenard's chemistry lectures, which deals with the teaching and research practices of one of Orfila's Parisian professors, and Ursula Klein's contribution on Orfila's plant and animal chemistry.

Returning to the issue of toxicology, there is an interesting history that emerges around the notion of "normal arsenic", which constitutes a technical, legal, and professional problem. After championing the validity of the very sensitive Marsh test for the presence of arsenic. Orfila later suggested that it might be detecting arsenic that was a natural constituent of the human body. This problem provides a nice example of the precarious nature of any test before it is "black-boxed", rendering the meaning and value of its results incontestable. Indeed, it is precisely its use in the antagonistic environment of the courtroom that destabilized the validity of a test that in the purely scientific context of the chemistry laboratory was accepted as a tricky, but essentially uncontroversial analytical technique. Thus, this history of the Marsh test and "normal arsenic" offers a nice case for those interested in the fate of scientific techniques outside the controlled confines of the laboratory.

Apart from its coherence, another thing that recommends this book is its presentation, with a high standard of editing and an attractive dust jacket. The editors managed to do all this and still offer a hardback at a reasonable price; quite an achievement in these days of the plunging dollar. Overall, I would highly recommend this book to anyone interested in either this central figure in the history of toxicology or the development of scientific expertise in the courtroom.

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Kay Peter Jankrift, *Krankheit und Heilkunde im Mittelalter*, Geschichte Kompakt, Darmstadt, Wissenschaftliche Buchgesellschaft, 2003, pp. ix, 148, SFr 25.90, €14.90 (paperback 3-534-15481-9).

This is a very good introduction to the study of medieval medicine. In this concise volume, Kay Peter Jankrift manages to cover most of the major medical trends over the