## **Book Reviews**

sexuality, the law, religion, and economic change, that was little known or little regarded before. Lloyd Bonfield, for example, shows that strict settlement came to predominate amongst larger landowners considerably earlier than previously thought – immediately after the Restoration. Roger Lee Brown reveals the surprising popularity of Fleet weddings in Hanoverian London – in excess of 6,000 a year. Vivien Brodsky Elliott shows what a large proportion of migrant women in late Tudor and early Stuart London had a free hand in choice of marriage partner, precisely because of the decease of their fathers. T. C. Smout demonstrates the steeply rising percentage of marriages in Victorian Scotland that were irregular (i.e., not conducted by clergy), strictly speaking illegal, yet never considered invalid.

And yet, almost with one voice, the contributors also bewail their ignorance and puzzlement. After beautifully demonstrating that the rising population of Georgian England was largely due to the parallel and related phenomena of earlier marriage, marriage amongst a higher proportion of the population, and rising bastardy, E. A. Wrigley confesses that all this amounts not to an explanation but an explicandum. Similarly, L. A. Clarkson raises but does not solve the conundrum that post-Famine Ireland combined an exceptionally high proportion of unmarried adults, yet an unusually high fertility amongst the married. Likewise, Martin Ingram neatly charts the decline of "spousals" between the fourteenth and seventeenth centuries, but fights shy of any secular social explanation.

Why this diffidence and humility? It is partly because contributors rightly recognize the shortcomings of their statistics. Partly also, "explaining" individual marital and sexual behaviour can be so question-begging. Kathleen M. Davies, in an excellent revisionist essay, shows there was nothing very novel, or very Puritan, about "Puritan" marriage advice literature in early modern England. And, in any case, she asks, did such books change the way people behaved? Did they not rather confirm what people did anyway, or confirm the stereotypes of proper behaviour, what you thought your neighbour ought to be doing? Similarly, Christopher Brooke uses largely literary evidence to show the growing importance of "consent" in medieval bonding. But, he asks, did life follow art, or art life, or did literature portray a golden world all of its own? In all this there is an element of once bitten, twice shy. For, as the editor, Brian Outhwaite notes, the last synthetic explanatory overview to have been offered, Lawrence Stone's The family, sex and marriage, has proved such a leaky vessel that historians are now rather chary about launching themselves on to the seas of speculation.

Yet this is not to say the volume contains no broad insights. Two press through again and again. One is a vindication of Malthus's idea of the power of "moral restraint": many of these studies show communities successfully regulating the age of marriage to harmonize with economic opportunities and other social arrangements. The other is the enduring vitality and validity of plebeian and popular concepts of what constituted a binding union (still in nineteenth-century Scotland the evidence of the freely given consent of both parties was, de facto, witness enough to wedlock). The very conflicting claims of superior powers – state, church, parents, and families – gave true lovers, and the unscrupulous, a lasting breathing-space.

Two small grumbles about what is otherwise a stimulating collection of essays, commendable for its coverage of Wales, Scotland, France, and the U.S.A. as well as England (though direct comparison remains a rarity). First, in discussions of demographic change, few of these authors take biological and medical evidence very seriously. Second, there is a rather sad division here between "numerate" historians, backed with their computers, and "literate" ones, using individual testimony and literary evidence. It is very desirable that this gap be bridged.

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EVAN M. MELHADO, *Jacob Berzelius, the emergence of his chemical system*, Stockholm, Almqvist & Wiksell; Madison, University of Wisconsin Press, 1981, 8vo, pp. 357, front., Sw. Kr. 225.00.

Although J. J. Berzelius (1779-1848) was a Swedish physician, his importance for medical

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historians lies chiefly in his enormously influential system of chemistry. With justice, he is often described as one of the founders of modern chemistry; his isolation of natural products from blood, bile, etc., his recognition of phenomena like isomerism and (especially) his sculpture of a vast and imposing edifice of organic theory lie at the roots of many later chemical developments, including the rise of chemotherapy.

This book is not a biographical introduction to Berzelius. It is not even a comprehensive survey of his scientific achievements in the round. We learn little of the man who generated the ideas, and nearly half the book concerns itself with the intellectual "background" of eighteenthcentury chemistry. What Melhado offers is a conducted tour through some of the convoluted twists and turns of Berzelius's chemical speculations up to about 1820, by which time he might be said to have reached his goal: a system of theory that would, at least in principle, encompass the whole of chemistry. Instead of presenting an analytical survey of the finished product, Melhado espouses a genetic approach, watching ideas develop on the way, and particularly ideas on the nature of salts, up to their attempted deployment in organic chemistry and mineralogy. Here, with meticulous attention to detail, is history of chemistry on the heroic scale: a largely internalist account in the older style (and none the worse for that), coupled with a more contemporary perception of the essentially dynamic nature of scientific theory. Even within its rather restrictive framework it is highly selective, avoiding even interesting chemical issues that do not bear directly on Berzelius's quest for a theory of salts, and majoring on his ceaseless search for "specifics", which would "earth" his theory on the bedrock of experimental reality.

Within its own terms of reference the book's intentions are largely fulfilled. One can, of course, cavil at the rather many misprints or literal errors (e.g. three on p. 337). The refusal to offer English translations of German or French citations is less serious than the reluctance to go to Swedish sources when they were the original versions. Berzelius so often modified his views when supervising translations of his Swedish papers into the European languages that, even if minor deviations were ignored, it would have seemed sounder practice to cite routinely from whatever source was the earliest. Chiefly, however, the book signally fails to live up to its intentions by avoiding questions of ideology, scientific philosophy, and the like, which we know conformed much of Berzelius's thinking.

Given the absence of biographical or social insights, it is inevitable that the book cannot rank as a definitive study. But, given also its painstaking attention to detail and "genetic" style of historiography, it will surely rank as a major source for such a study.

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