(considered until the late nineteenth century as a "real joke"), and its strange insouciance regarding tuberculosis even though it had the highest mortality rate in the Confederation (18.6 per thousand in 1928, against the Swiss average of 13.5 per thousand). The most critical flaws were ethno-cultural antagonisms between the Upper and the Lower Valais, quarrels between neighbouring villages, rivalries between religious congregations. A cantonal public health service was created in 1917, but we are told that the doctor's post was "highly exposed" to endless criticisms. Consequently, a Federation of Anti-Tuberculosis Leagues was established only in 1931, a canton sanatorium in 1941 and a nursing school in 1944. The gradual secularization of health care was not initiated until 1960.

Intense provincialism, government inactivity, and balkanization: are these features peculiar to the Suisse romande? The authors refer mockingly to the 1961 law as "the first health law of the xxth century". Why not look further afield than their homeland, at France for instance, where the flimsy public health structure was also falling apart. Apparently for a young Valaisanne to study midwifery in Lausanne, Berne or Saint-Gall in the 1920s was to "exile herself". But narrowness of horizons is the most common thing in the world, not unlike feelings of hostility towards general practitioners, or the "head in the sand" approach to social scourges (tuberculosis or syphilis) that it was hoped could be cured without their being recognized. What appears to be peculiar to the Valais is the excessive importance given to private initiative, above all denominational. It seems unbelievable that it was necessary to wait until 1945 for the school medical service created in 1907 to be equipped with an X-ray machine, thanks to private funds. As for the rest—the deep and fatal apathy of public opinion, the protracted ineffectiveness of governments-evidence suggests that Alpine Europe as a whole was hardly the poster child for prevention. Accordingly, the absence of a comparative dimension is felt all the more strongly.

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Stephanie J Snow, *Operations without pain:* the practice and science of anaesthesia in Victorian Britain, Science, Technology and Medicine in Modern History, Basingstoke, Palgrave Macmillan, 2006, pp. xii, 271, £50.00 (hardback 1-4039-3445-2).

As Stephanie Snow reminds us in the introduction to her excellent first book, anaesthesia has since the mid-nineteenth century widely been seen as "the most powerful example of medicine's capacity to transform human experiences of suffering and pain" (p. 2). Perhaps, then, it is not surprising that the historiography of anaesthesia is one of the last outposts of unreconstructed medical triumphalism. Titles such as Milestones in anesthesia and The battle for oblivion reflect a general unwillingness amongst writers on this subject (frequently senior or retired anaesthetists themselves—plus ca change) to go beyond an uncritically deterministic narrative, in which the adoption of anaesthetics in Britain after Robert Liston's demonstration of ether in December 1846 was rapid, universal and historically inevitable.

Operations without pain is both a magnificently acute corrective to this outdated corpus and a fascinating, original piece of historical analysis in its own right. Snow breaks down the traditional celebratory story to give a richer and more subtle account of the introduction and dissemination of anaesthetic theories and techniques, drawing on John Pickstone's work on the shift from biographical to scientific models of medicine. By exploring the writing of Humphry Davy, Thomas Beddoes and other Enlightenment experimentalists she gives British anaesthesia a substantial prehistory, based around a compelling demonstration of the "dissociation of sensibility" (noted by T S Eliot in a different context) that enabled early nineteenth-century physicians to conceive of life without (apparent) nervous irritability, and hence to imagine the possibility of inducing controlled, reversible anaesthesia.

Snow divides the six decades between Liston's demonstration and the end of the century into two broad and overlapping periods. Between the late 1840s and the early 1860s every aspect of anaesthesia—its mode of action, practical applicability, safety and ethics-was widely debated in medical, public and governmental circles. From the early 1860s anaesthetic techniques were a generally accepted, but certainly not unproblematic, part of medicine, surgery and dentistry, and by 1900 the practices and structures of anaesthesia as a medical speciality were firmly established in Britain, Public views of anaesthesia, however, were not so straightforward. Snow identifies a widespread "fear of unconsciousness" in the late nineteenth century: in clumsy or malicious hands chloroform might result in robbery, kidnapping, "violation", a loss of proper self-control or even death. Such fears informed a more selective attitude in submitting to anaesthesia than the casual observer of this period might at first imagine.

For this reader the most fascinating part of Snow's book is an analysis, taken from her doctoral research, of almost 4,500 anaesthetics from the casebooks of Dr John Snow, backed up with case reports from several large London hospitals. John Snow's self-confessedly scientific attitude to anaesthetics is contrasted with James Young Simpson's more traditional biographical approach to show that, contrary to received wisdom, "scientific medicine" before 1860 was as much a determinant of practice as it was a rhetorical strategy.

Snow's prose is lucid and expressive, her theses insightful, her conclusions illuminating and well supported. Though neither dental nor military anaesthesia here receive the attention they merit, this is less an omission and more a call to further research in these fields. This book deserves to become both a standard reference work for students of Victorian medicine and a template for future workers in this field. If *Operations without pain* receives the perceptive readership it demands we may expect to witness the beginning of a rewarding new era in the historiography of anaesthesia.

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W D A Smith, Henry Hill Hickman Sheffield, History of Anaesthesia Society, 2005, pp. 80, illus., £10.00 + p&p (paperback 0-901100-59-5). Orders to: Dr Adrian Padfield, 351 Fulwood Road, Sheffield S10 3BQ.

What prompted the Shropshire surgeon, Henry Hill Hickman, to carry out a series of animal experiments on suspended animation around 1823? For decades this question has puzzled those interested in the history of anaesthesia and indeed has contributed to the curious pre-history of anaesthesia in which the experiments of men such as Humphry Davy, Crawford Long, Horace Wells and, of course, Hickman, hang as shadows on the landscape.

Hickman experimented at a time when understandings of asphyxia were changing. Once understood as an absolute, death began to be conceived as a process during the eighteenth century and medical research began to focus on resuscitation and the various techniques that could restore life in a body with no pulse or respiration. Thus Hickman knew suspended animation as a form of asphyxia; a state in which respiration had been suspended but life still existed—hence his use of bellows during a seventeen minute amputation of the leg of a dog. It is clear too that Hickman had absorbed the new configurations of the nervous system which emerged from the work of Charles Bell in Britain and François Magendie in France in the 1810s and which supported a separation in the functions of mind and body. Hickman predicated his experiments on the belief that if applied to humans, the key benefit would be the suspension of the mind of the patient and thus the absence of anticipation of suffering, as well as the relief of physical pain. Hickman's use of the new anatomy and physiology in his quest to alleviate surgical pain makes him pivotal in the wider history of anaesthesia. Writers have often pondered on the apparently inexplicable fact that Humphry Davy's 1790s research into nitrous oxide did not lead to the development of inhalation anaesthesia. But Davy's conception of the