

for biopsy and are relatively simple surgical targets.

Cancer was made into a “pathologists’ disease” in the early twentieth century as surgeons moved from extirpating hideous ulcerating tumours of the breast for palliative reasons to cutting out large tumours which produced no symptoms or less dramatic ones such as inversion of the nipple. Pathologists could usually pronounce with certainty on the cytological signs of breast cancer in such growths. But what about small lumps composed of slightly unusual cells? Would these develop into cancer? How could anyone know? Should they be removed prophylactically? Population studies and animal experiments said nothing about any particular case. The same phenomenon was observable later with cervical cancer and the use of the Papanicolaou smear; how could anyone be sure an “abnormal smear” would “progress” (odd word) to full-blown malignancy? It was into this area of uncertainty that culture could creep and it is this that Löwy explores in the first half of her book showing how individual, institutional and national differences produced a huge range of responses to “precancer” from conservative clinical observation to radical surgery and radiotherapy. Löwy shows that in many instances doctors only covered their ignorance by the use of inaccurate descriptive language which hid more than it revealed. This was apparent from the fact that agreement was never universally arrived at over what terms like “cancer in situ” meant. More interestingly this perception is not the result of Löwy’s historical hindsight; really smart surgeons and pathologists repeatedly recognized the problem. Where some pronounced science would resolve all uncertainties others were aware that the uncertainty was the human element in science. For me, some of the best pages in the book report the penetrating, witty analysis of cancer terminology by “Pierre Denoix, a central figure of French and international oncology”, who, for example,

defined “early” as “an English term, that, contrary to what one might think does not mean ‘early in time’” and “in situ” as “a French term for a silly or tautological expression” (pp. 164–5). Framed by Löwy’s analysis these and other definitions are devastating criticisms of those who profess the opinion that prophylactic cancer therapy is or could be a practice based on certain science.

Much of the second part of the book is devoted to the study of heredity and its links to overt cancer development. In brief, Löwy shows that once again within the space of uncertainty—does having the two BRCA (BReast CAncer) genes mean a woman *will* develop breast cancer?—culture exercises its ineradicable influence. A consequence of these uncertainties has been that cancer specialists have turned deficiencies into virtues and dumped decision making on to the patient—the fully informed woman in possession of all the information can decide whether she wants a prophylactic mastectomy (which may of course prevent something that will never happen). It is clear from this book that those who practise medicine are like those who produce historical studies of science: there are some who think proper science will eventually eradicate culture from its domain and those who accept its social nature as essential. This is a major study for doctors and historians alike.

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**Jacqueline H Wolf**, *Deliver me from pain: anesthesia and birth in America*, Baltimore, Johns Hopkins Press, 2009, pp. xiii, 277, £26.00, \$50.00 (hardback 978-0-8018-9110-6).

Using pain control as her focus and the myriad ways that both women and physicians

responded to it, Jacqueline H Wolf has written a fascinating overview of childbirth from the 1840s to the present day. In doing so she has used women's voices to advantage, letting them tell their own experiences. In her introduction, Wolf introduces some of the underlying themes of her study. First is the binary interpretation of childbirth's process, the disagreement between physicians as to whether childbirth is a natural experience and thus not needing significant intervention or a likely pathological event necessitating significant medical involvement to save either mother or child. Second is the contingent nature of childbirth practices and experiences. Physicians have long misinterpreted the latter, Wolf argues, leading to a disjuncture between the two. Third is the centrality of pain, how it is understood and responded to, and the cultural nature of both. Fourth is the drive of physicians to expand their area of control within medicine, including childbirth, even when seemingly responding to the demands of women. Overriding all is the cyclical nature of both physicians' and women's responses to childbirth and its pain. Unstated is the exceptionalism of American intervention in childbirth compared to other western countries.

The six chapters are chronologically divided. Chapter 1 (1840s to the end of the century) introduces the professional discussion over the nature of childbirth and its relationship to the use of anaesthesia. Chapter 2 (1890s–1930s) tells the often told story of twilight sleep and how some wealthy women pressured physicians to respond to their desire to be more involved in how their childbirth should proceed (painless). The medical debate itself over twilight sleep is a fascinating reminder that the medical profession seldom speaks with one voice. Chapter 3 (1900–1960s) and Chapter 4 (1940s–1960s) examine the issue of anaesthesia's safety and the response of women and doctors to the baby boom respectively. The latter chapter begins the fascinating examination of more contemporary

childbirth. Obstetricians beset by so many children being born develop a more "predictable" and "systematic" way of managing childbirth, at the same time that women are looking for one that is more "convenient" (p. 10). The next two chapters were my favourites, reading as they did as an almost narrative story of challenge, success, and eventual failure for those wanting to engage in childbirth as a natural and physiological process that worked on its own timetable. As Wolf points out, the irony is that the success and failure of that understanding were based on women's right to choice. By the end of the century, the needs of women had changed. Instead of wanting to engage in a birthing experience that would be a central life experience, many women wanted and demanded childbirth that was planned, efficient, took as little time as possible, and could be experienced with little pain.

The contingent nature of pain and how to respond to it is the leitmotif underlying the book. Varying views of pain at particular times determined whether a birth was a good one or not. The amount of intervention that takes place in an American birth today, linked as it often is to limiting pain, is what is exceptional compared to other countries. What is also exceptional are the infant mortality rates that are higher in the United States than any developed country be it in North America or Western Europe. While infant mortality is linked to many factors, one of them is the nature of childbirth and the degree of intervention that takes place and, as Wolf has argued, pain control is central to that intervention. Why are there higher intervention rates in the United States compared to other developed countries? That is the unasked and unanswered question.

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